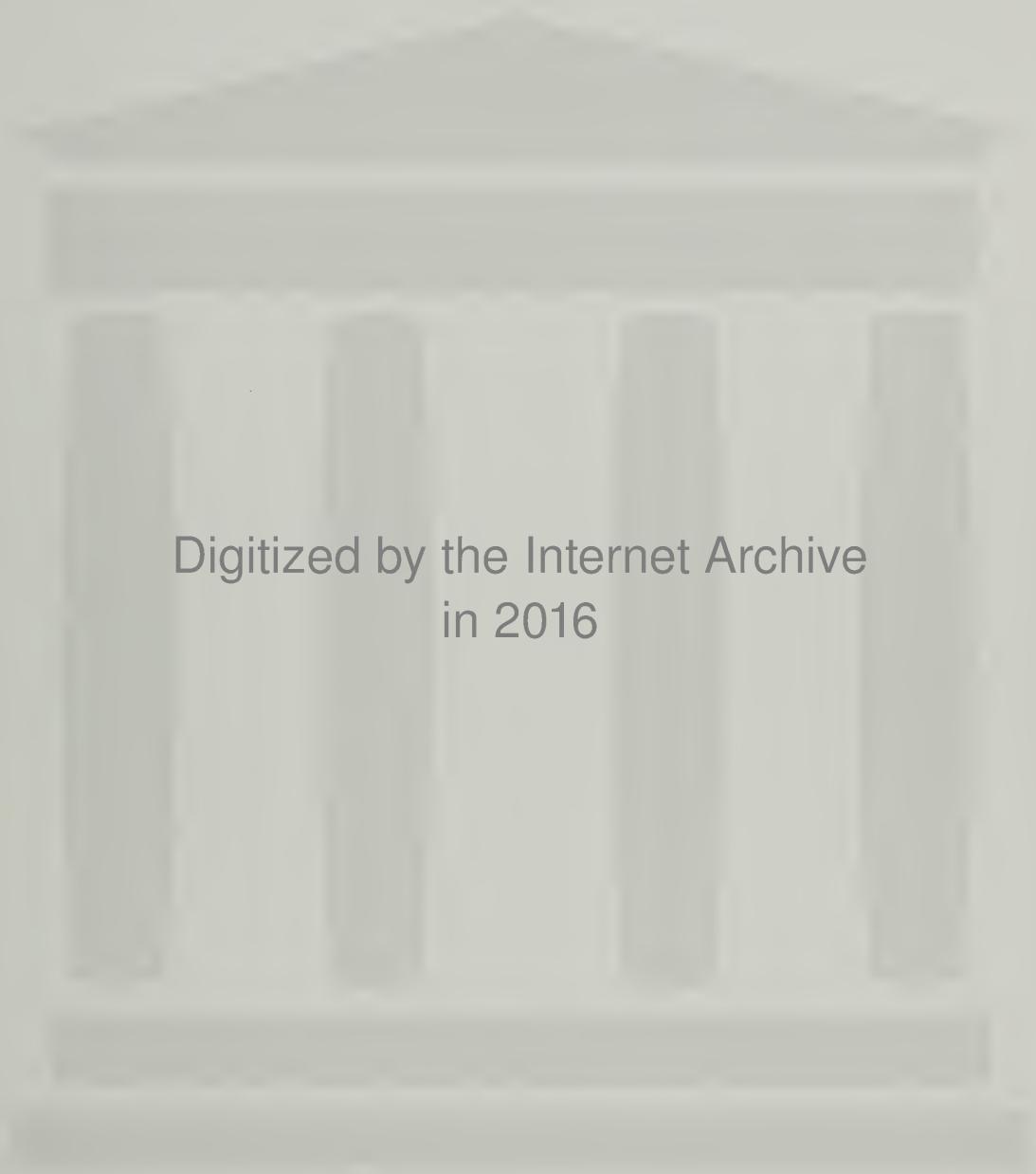
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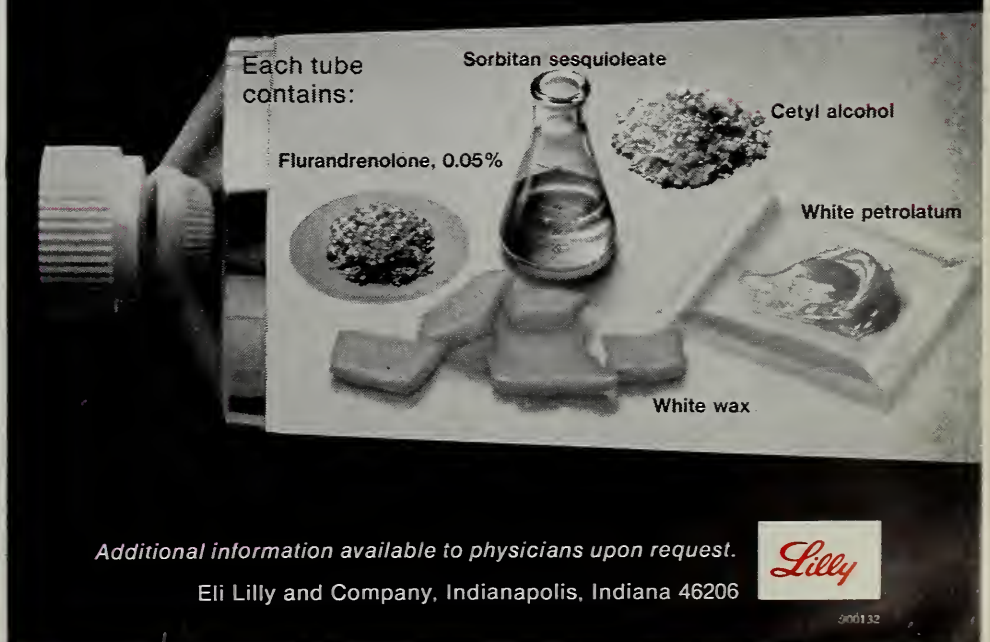
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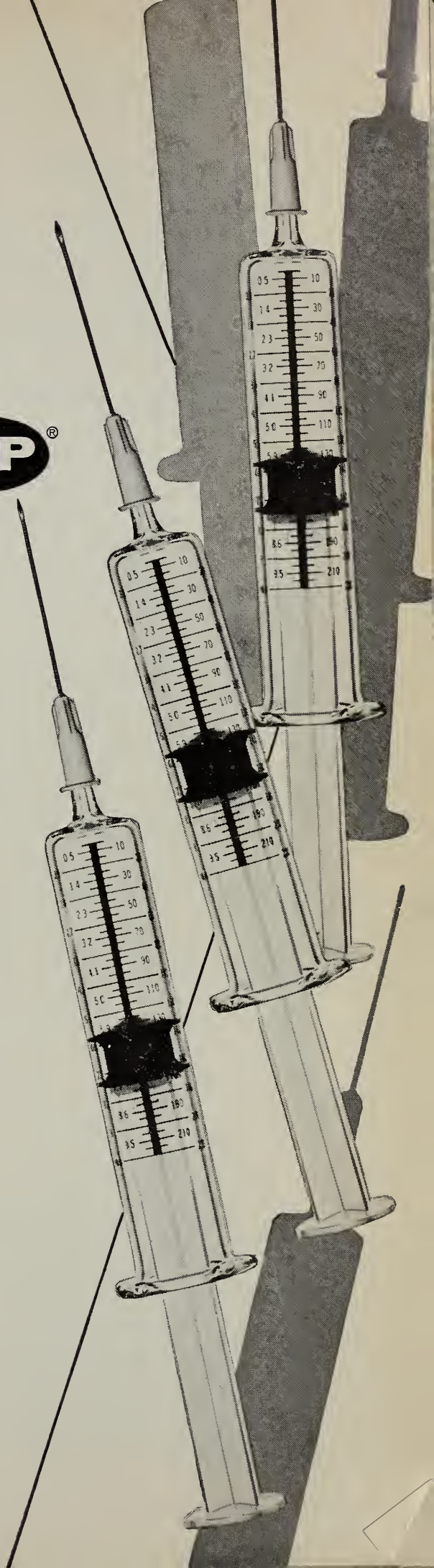
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Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville, Tennessee 37203.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

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Journal of the Tennessee Medical Association
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VOLUME 62 JANUARY, 1969 NO. 1

Every other year TMA calls a conference of its officers and those of its component county societies for a review of trends in the socio-economic aspects of medical care. Several of the presentations will appear in this and subsequent issues of the *Journal*.

Changing Patterns Of Health Care*

A. B. SCOVILLE, M.D.,† Nashville, Tenn.

This is a crucial period during which a transition of medicine in the United States is taking place. The transition of the time . . . revolution if you will . . . is the imposition of lay judgment on the health field. It is not just the creeping socialism and increasing federalization of health care programs which has preoccupied our thinking for so long.

You are all familiar with the rugged individualism and fierce independence of the physician and the inculcation of this concept beginning at the time of his selection as a candidate for medical school. You have participated in the truly magnificent development of medical technology and scientific advancement. You have been a part of the change in medical education and the organization of the hospital. Your hands have helped to lift the practice of medicine out of the "little black bag" and put it in the institutional setting of offices, hospitals and health departments. In these settings are amassed the expensive and vastly complicated equipment and the rapidly proliferating technical and paramedical personnel to assist you in ministering to health needs. The physician has been the central focus throughout this process.

Now, the layman has become concerned. He is confused about his method of entry into this complex and multiplex conglomerate of human, mechanical and scientific marvels which so intimately affects his very existence and at the same time appears to be less personal or dehumanized. He is somewhat more sophisticated regarding the quality of health care and he is very much concerned about the rapidly escalating cost of this care and its increasing involvement of men, money and materials. As evidence of this concern, witness the increasing interest of Big Business, Big Labor and Big Government.

The concern has been enunciated as public goals embodied in an epidemic of federal legislation. As part of this legislative action the 89th Congress declared that they recognize the changing character of health problems and they find that comprehensive planning for health services, health manpower and health facilities is essential. They passed an act known as "Comprehensive Health Planning and Public Health Service Amendments of 1966." The declaration of purpose of this legislation says that all health resources must be marshalled "to assure comprehensive health services of high quality for every person . . ." and then added as an apparent afterthought ". . . but without interference with existing patterns of private professional practice of medicine, dentistry and related healing arts." This is contradictory on its face. No one who has given this legislation a minute of contemplation can really believe that comprehensive health care can be made accessible to every person without interfering with existing practice. It is this legislation which I commend to your attention and which has been discussed by your previous speakers. The question is no longer whether or not we will have health planning but rather how it will be done and will the physician remain the central focus. In spite of the changes occurring, the people

*Presented at the Fifth Biennial Tennessee Medical Association State and County Officers Leadership Conference, November 17, 1968, Nashville, Tenn.

†President, Health and Hospital Planning Council, Nashville, Tenn.

still look to the physician for medical guidance instead of the government, but now they want a new direction of this leadership which is responsive to the needs as they see them. They are particularly concerned that there be greater articulation regarding efficiency, cost, accessibility and quality of health care. The physician who is "too busy" today may contribute to the surrender of future control.

Since I am most familiar with Nashville's health problems and activities, I will refer to the local situation as an example. Our past studies have indicated that local data reflect averages and trends which are remarkably similar to national statistics. The problems in Nashville are not all unique. They are shared by Memphis, Knoxville, Chattanooga and, to a degree, by the less populous areas of the State and, indeed, across the nation. We are concerned with the rising cost of health care, patterns of entry and delivery of health services, effective and efficient utilization of facilities, services and manpower and care of the medically indigent. Time will not permit a detailed examination of these matters but a brief view of the magnitude may serve a useful purpose.

It may be surprising to some that the estimated total annual expenditure for health in Davidson County alone is of the order of $125 million.

Needless to say, this is a sizable package to finance, and of course, it is increasing and this kind of money attracts a great deal of interest.

The kindest way to categorize the patterns involved in the delivery of health services is to use the word "fragmented." The Health and Hospital Planning Council has prepared a preliminary inventory which in thirteen pages itemizes more than a hundred individual facilities offering more than fifty major services. This does not include the more than 500 physician offices and nearly 200 dental offices. But even for those of us who have some awareness of this milieu, there is seen no coordination or means to provide continuity of care. To the person who requires these services, particularly the poorly educated and the economically deprived, there is hopeless confusion and inability to penetrate this maze to avail himself of needed care. Until there is an effective mechanism to coordinate these services, we cannot reasonably expect very much efficiency of utilization. Manpower is unquestionably an overriding problem in this regard. It must be examined from the point of view of utilization, quality, efficiency and education at all levels and may lead to the development of approaches which we have never before considered.

There is not time to even itemize all of the barriers and problems pertaining to the effective and efficient utilization of resources. You are all familiar with this fragmentation and gaps: notably, in the areas of rehabilitation, mental health, mental retardation, alcoholism, emergency and ambulatory care, ambulance service, liaison (even among physicians) and the endless pile of paper work and meetings. It may serve a purpose to call specific attention to one element in the problem of effective utilization. This is the problem of coordination of federal, state and local programs and projects. In part, this function is assigned to the newly created State Division of Comprehensive Health Planning.

The final problem I will mention is the care of the medically indigent, not because their care is or should be any different but because it deserves and is receiving special attention. It has been estimated that there are 100,000 in Davidson County who may be classified as medically indigent. Many, if not all, of these people have no family physician and they depend heavily on the public health department and hospitals for the care they receive. To get an idea of the volume of services we can look to the emergency and out-patient departments of our major hospitals. In 1960 there were about 78,000 emergency room visits. This has demonstrated a sharply increasing trend, and in 1967 there were more than 105,000 visits. Out-patient departments have shown a slight fluctuation around 185,000 visits per year since 1961. Most of these, of course, are at the Nashville Metropolitan, Hubbard and Vanderbilt Hospitals. Care of these patients is intimately associated with the magnitude of public health, welfare and teaching problems. The federal government has provided assurance that emphasis will be directed to the needs of the medi-

cally indigent. A solution to this problem will require a private-public collaboration of the highest order.

An areawide health planning agency such as our Health and Hospital Planning Council offers a local mechanism for coordination and an orderly approach to the many and complex problems before us. Working in the areas of practical *research, coordination* of projects, and *education* of both consumers and providers of services regarding needs and resources, it can serve a needed and useful catalytic function. It is important to note that such a Council will serve as the only *voluntary* link between private programs and the state-federal health planning function. Without it, the State Agency will assume the health planning function for the local level.

As we take this bold step into the future we can anticipate more rapid change than we have seen in the past. It is this rapid change which clouds our crystal ball and obscures our vision beyond 1975 or 1980. Even in this relatively short span of time we must anticipate rather abrupt changes in the trend lines. Because of this state of flux, uncertainty and agitation, I will not attempt to make any predictions but will simply itemize, without amplification, some of the things which we see beginning now. A central theme of this presentation is that the consumer, the lay person, will continue to take increasing interest and concern in health matters and will demand a voice in its direction. This will be reflected in financial and legislative action.

We are aware of the increased activity toward the development of a comprehensive rehabilitation center and neighborhood health centers for the poor and child care and mental health programs. We expect to see greater concern with dental care, particularly preventative care. There will be changes in educational programs but this will be a long process and formal programs of education will shift more to the university setting.

There are at least three areas in which major changes will occur. They are financing, hospital organization and public health.

We can expect the total expenditure for health care to increase, but there will be a shift in charges for this service to more nearly approximate the cost for the services performed. Third-party mechanisms through Big Business, Big Labor and Big Government, will provide more comprehensive financial coverage. Government reimbursement may account for more than 50% of the total.

In the institutional organization we see some very dramatic changes. We can expect a lower utilization rate for acute care and more extended care beds and facilities. These will not be as closely related to hospitals as some of us think is desirable and they may reach excessive numbers. There will be a very significant change in hospital out-patient departments, especially in the university centers to accommodate to the changing times and still provide for the educational program needs. An interesting structure for the institutional system may be evolving. I wish there were time to explore it in detail. It may briefly be described as follows:

At the first level located in the urban core city is the *University Center* which contains 1200 to 1500 beds, has comprehensive diagnostic and treatment services, medical school affiliation, is research oriented, has salaried chiefs of service and would most likely be designated as the Regional Medical Center. At the second level located in the outer city-suburban area is the *Specialty Center* which will serve population areas of 50,000 to 75,000, have 50 to 100 acute care beds, 100 to 150 extended care beds, be affiliated with group practice, have limited services, be nonspecialist oriented and strongly oriented to out-patient care. This would provide the primary entry into the health care system and may be more proprietary in nature. It offers a means for the physician in the private practice of medicine to effectively relate to the total system and at the same time maintain his professional integrity. It is not unreasonable to expect some modifications of this prototype system to evolve. This is the point where the private physician has the opportunity to most effectively demonstrate his ability to cope with the factors of cost, quality, utilization and efficiency. I appeal for your very careful consideration of this opportu-

nity. The government must not be permitted to prostitute health care simply as a result of default by private interests.

The area of public health will have the greatest government and legislative stimulus. It will be the area which will require the most careful guidance, control and planning if we are to avoid overextension by going in too many directions too fast. Local government will become increasingly less involved with acute care and more concerned with long-term and sheltered care. There will be emphasis on the poor and environmental factors with the potential for greater public health incursions into the provision of personal health services.

Obviously these are broad and general views of the future. They are related to national trend. The noteworthy point is the emphasis on "bigness" and the superimposition of lay judgment in health matters. You have an opportunity to be a part in the decision of how we will organize and direct this development. It cannot be left to chance. Part of that organization has been offered in the form of local voluntary areawide health planning agencies and through representation on the State Agency. I will close with a quotation reported in the February 14, 1966 issue of the *Journal of the American Medical Association.* In a paper by James H. Cavanaugh, Ph.D., who until recently was the director of Comprehensive Health Planning of the nation, is this statement: "It is probable that government intervention in areawide hospital and health facility planning in the future will be in direct proportion to the degree of failure of hospitals and allied groups to voluntarily develop and implement effective plans." He goes on to say, "If it is determined that existing planning organizations are ineffective due to a multiplicity of reasons, including lack of physician interest and support, then let it be recognized that the alternative is some larger organization, possibly remote, which will possess some form of centralized authority."

* * *

CARDIOVASCULAR EFFECTS OF GLUCAGON IN MAN. Parmley, William W., M.D., Glick, Gerald, M.D., and Sonnenblick, Edmund H., M.D. New England J. Med. *279*: 12, 1968 (July 4)

Glucagon, a polypeptide hormone produced by the alpha cells of the pancreas, acts primarily on the liver to elevate blood sugar, and accordingly has been administered clinically for the treatment of hypoglycemia. Other actions of glucagon include the inhibition of gastrointestinal activity, enhanced excretion of water and electrolytes, and a positive inotropic and chronotopic effect on the heart. Glucagon had been shown in experimental animals to exert a number of beneficial cardiotonic actions without increased myocardial irritability. In view of these favorable results in animals, 21 patients were studied at the time of diagnostic catheterization and similar findings were noted.

Glucagon was able to increase contractility even without overt heart failure. The inotropic action was not related to the hyperglycemia induced by glucagon as dogs receiving insulin simultaneously to maintain a constant blood sugar continued to demonstrate the increased cardiac contractility.

In man, glucagon also has a modest chronotropic effect with an increase in heart rate following 3 to 5 mg of glucagon intravenously.

This study suggests that glucagon may be a useful adjunctive drug that could be given along with the more conventional forms of therapy for the treatment of acute heart failure. Of clinical importance is that the inotropic effects of glucagon are manifest even in the presence of full digitalization and that the increase in contractility is not accompanied by increased myocardial irritability or increased peripheral resistance.

The side effects of glucagon are minor. With doses greater than 5 mg. given intravenously, nausea and vomiting may occur. Since glucagon releases catecholamines from pheochromocytomas, it should be administered cautiously to hypertensive patients and phentolamine (Regitine) should always be immediately available.

In conclusion, glucagon has been demonstrated to have significant beneficial effects on the heart in man. (*Abstracted for the Middle Tennessee Heart Association,* Fred M. Downey, Jr., M.D., Nashville)

Patterns For The Future: A Second Look*

MORTON D. MILLER,† New York, N. Y.

It is a pleasure for me to be with you in Tennessee again. I fondly recall—from 1948 to 1952, more years ago than I like to think about—many interesting visits to your state, and the lively discussions we had at that time regarding the development of the Tennessee Surgical Plan. This plan, you will remember, was developed by your Association with the assistance of our industry. It was an exciting experience for me, and a role I enjoyed immensely. I remember well our fine working relationships with the outstanding men on your Executive Sub-Committee—men such as Doctors Daugh W. Smith, Nathanial S. Shofner, and Rudolph H. Kampmeier, and Mr. Charles L. Cornelius, Sr., who met with us regularly in designing this novel, forward-looking project aimed at stimulating the growth of voluntary health insurance.

Since then, we—The Equitable—have come to Tennessee to pay claims for doctors' services under Part B of the Medicare program. We are here with a good-sized operation; all told there are 150 employees in our Nashville Medicare administration office.

You will be interested to know that we process about 2,500 Medicare claims every working day and that, since the program was launched, we have paid out more than $36 million in Medicare funds to Tennessee beneficiaries.

From the very outset we have received exceptional cooperation from you and your medical colleagues throughout the State, for which we are very grateful. Your fine support has helped so much to make our Tennessee Medicare operation one of the smoothest and most efficient in the country.

In January of 1967, I had the pleasure of meeting with some of you—and with some of your colleagues from around the country—at the First National Congress on the Socio-Economics of Health Care, sponsored by the American Medical Association in Chicago. In the talk I gave there on this very subject, "Patterns For The Future," I called attention to the changing expectations toward health care, and pointed out how we, in the insurance industry were attemping to meet this challenge.

As I look back, we saw very clearly that we were facing a new situation which required a radical adjustment in what we had been doing until then. However, as I take a second look today at patterns for the future, I think we may not have fully appreciated the fact that change in our society would become a constant—that change is to be the dominant condition. We are in a time when changes are occurring so rapidly that before we will have adjusted sufficiently to the needs of one new situation we will have to begin to react to another, as new changes are expected by our clients or patients or are necessitated by new circumstances. This is occurring throughout all of our society, and the field with which we are all most directly concerned—health care—is no exception.

What these rapidly changing times require of us, therefore, is an entirely new stance. We can no longer simply react to change; we must put ourselves in a position where we can help direct change, not in an authoritarian or control sense but through partnership involvement, in the way envisioned in much recent essentially nonpartisan federal legislation, such as the Partnership for Health Act and the Regional Medical Programs.

We in the insurance industry have recognized the tenor of the day. We are in the process of changing from solely a financing mechanism to a broader social instrument —from a limited perspective of our role to a new self-awareness of what we, as trustees of so large a share of the public's health funds, can and shall do to improve the effectiveness of care. We believe the public expectation that adequate health care should be available to everyone is legiti-

*Presented at the Fifth Biennial Tennessee Medical Association State and County Officers Leadership Conference, Nashville, Tennessee—November 17, 1968

†Vice President and Chief Actuary, Equitable Life Assurance Society of the United States, New York, N. Y.

mate, and we know it presents a new and dramatic challenge for mutual planning and cooperative effort between government at all levels, on the one hand, and all private and voluntary health interests, on the other.

We are seeing the evolution of a complex series of interrelationships among the problems of:

Planning and organization of facilities and services;

Recruitment and training of health manpower;

Provision of quality care; and

The cost and financing of such care.

Insurance companies are re-examining realistically their present coverages and procedures and, in particular, are giving urgent and serious attention to:

Stressing the need for adequate coverage;

Escalating efforts to extend insurance to people presently not insured or under-insured;

Creating new and better marketing approaches and techniques to help meet the needs of the public; and

Reducing contract and underwriting restrictions so as to make insurance increasingly available to more people.

In short, there is emerging a renewed determination on the part of private health insurers to build on the already impressive record of achievement in extending health care protection to the American people.

May I remind you of that record. It shows that 162 million Americans last year held voluntary health insurance to assist them in meeting their hospital and medical expenses. More than 100 million of these individuals were covered by private insurance companies, whose total payments for health care expense amounted to more than *$6 billion* per year—about $16 million today and every day paid out for hospital and medical care.

Yes, the pattern for the future in health care is change. And many voices are sounding the clarion call for an effective response to change. For example, at the annual meeting of the American Hospital Association, Dr. George W. Graham, president, said:

"Let us exploit change, rather than fall victim to it. We are in a world where nothing is remaining the same—especially human nature and the forces swirling about us, having their impact on us—and where position, leadership, and power depend irrevocably on the ability to keep pace with change."

In commenting on the report "Financial Requirements of Health Care Institutions and Services," Dr. Graham went on to say that this document would "place our hospital field ahead of its time in acknowledging and accepting the responsibilities of the social and economic changes necessary to keep health services responding to the needs of the American people."

Another voice, Dr. Dwight Wilbur, president of the American Medical Association, added a note of crisis and a plea for involvement of the physician in the decision-making process surrounding those elements which are so vital to the concerns of the physicians.

"These times are beset with problems and challenges that must be solved or met effectively if we are to make sure the present state of things does not turn into a real crisis," Dr. Wilbur said. "Rightly or wrongly, physicians share the current criticism of rising hospital costs, as well as of increased medical charges. It seems fitting that physicians also should share the responsibility for establishing and controlling hospital charges.

"Although physicians are responsible for ordering most of the services and supervising most of the people in a hospital, only rarely are they given a clear picture of the hopital's sources of income, financial status, operating expenses, payroll and the like."

Dr. Wilbur went on to appeal for the placement of all physicians under the supervision of the medical staff rather than the hospital administrator.

Needless to say, "I am in no position to judge the wisdom of his recommendation, which I leave to those of you who are more directly involved. But I was heartened to read these comments by Dr. Graham and Dr. Wilbur. They support my notion of the challenge of change in our industry—the health care industry—and of the importance of involvement in those decisions which are so vital to our concerns.

The question of health care costs was mentioned. Costs are quantifiable and visible and, thus, easily make the news. The rapid increase in cost of the last few years and the threat of pressures toward increasing costs ahead have turned attention more

and more to the organization of our system for providing health care. Does the system offer benefit value commensurate with the increasing costs? Are the costs buying what we need as a society in the way of health services?

These are the kinds of questions considered at the National Conference on Medical Costs sponsored by the Department of Health, Education and Welfare in Washington last spring. In his summary statement at the close of the meeting, Dr. John W. Gardner, then Secretary of Health, Education and Welfare, had this to say:

"Everyone seems to agree that the existing system—or lack of system—has rather marked shortcomings. But there is not yet any agreement as to what a more perfect system would look like. It seems likely that we will go through a period of experimentation and, in true American fashion, may end up with several variations in different parts of the country, suiting local preferences and conditions.

"Whether the health care system of the future should develop around the hospitals as an organizational focus, or around the payment mechanism, or around group practice plans, or around all of these in some sort of collaboration with State health planning councils—or whether other variants will emerge—is still a wide-open question.

"One thing is certain, the two or three years immediately ahead must be years of intensive experimentation and data gathering. We need to gather the kinds of data which will permit us to choose among those alternatives. We need vigorous experimentation."

Dr. Gardner put the issue plainly:

"We cannot go on as we have in the past. New patterns will be necessary. Those who entertain some apprehension as to what the new patterns will be had better plunge in and experiment with their own preferred solutions. Standing back and condemning the solutions that others devise won't stem the tide of change."

And, in fact, new approaches are being tested—there is a ferment not only of talk but of action and much potential. A new spirit seems to prevail among laymen and health professionals alike; a spirit that is constructive and suggests that the idea of a mutually productive "partnership" might be more than mere rhetoric. Let me illustrate this new spirit by referring to several current developments.

There is much talk about the potential of group medical practice. Group practice is seen as offering the hope that closer integration and organization of services can be achieved, that the time of physicians and patients can be conserved, that new technology and new types of personnel can be better utilized. In short, it is thought that productivity can be increased and better care for the patient can be provided, not only for diagnosis and treatment of acute and serious illness but for health maintenance, early diagnosis, and prevention of disease.

The fact is, however, that group medical practice has not spread widely. And it is only a matter of simple candor to note that until quite recently it has been a topic of high emotional content insofar as many physicians are concerned.

It is significant, therefore, to mention last year's National Conference on Group Practice, sponsored by the Department of Health, Education and Welfare. The discussions were participated in by a wide range of interests—not only the "true believers" of group practice, but by leaders of the medical and health professions and health services, of the academic community, and of business, labor and insurance.

From personal observation, I can attest that it was a dialogue marked by seriousness of purpose, a candid exchange of views, and an obvious willingness to deal objectively with realities, including costs, manpower, and quality of care.

As an outgrowth of the Conference, insurance companies have been considering what role we might have in the spread of group practice. Can we include group practice options within our insurance plans? Could we successfully engage in the sale and administration of both group and solo patterns of medicine? The experimental group practice plan being developed at Harvard University hopes to provide some of the answers to these questions. The plan is to be known as the Harvard Community Health Plan. It is expected to become operative next year and will use insurance companies and Blue Cross-Blue Shield in its marketing and administration as well as for risk bearing.

The "Partnership for Health" concept is embodied throughout the Comprehensive Planning Act of 1966 (P.L. 89-749) and the 1967 amendments (P.L. 90-174). This morn-

ing you heard Dr. Homer Hopkins' outstanding report on the progress already made in implementing this important legislation here in Tennessee. With Dr. Hopkins' splendid leadership you can be assured that comprehensive health planning in your state will work effectively. What's more, sound, broadly-based planning will go far toward seeing that health care of high quality will be available to the people of Tennessee on a most economical basis where and as needed.

Our industry has long supported area-wide planning and, perhaps, were even ahead of the times in developing opportunities for our personnel to become involved in health planning bodies—locally and on a regional basis. The advent of the "Partnership for Health" legislation gave added emphasis to the urgency for constructive action in this area. In recognition of this fact, and in anticipation of the many challenges and opportunities which this development represented, the health insurance business adopted a policy and a program in support of community health planning based on:

(1.) *Active involvement* in community health planning groups through appropriate participation of qualified insurance personnel in state and area-wide groups;

(2.) *Financial support* of community health planning operations by allocation to appropriate groups of funds provided on an industry-wide basis, although on a limited scale; and

(3.) *Technical backup* of industry participants in community health planning assignments with background material, information and counsel.

Our industry's effort is referred to as Hi-Chap—the Health Insurance Council program for Community Health Action Planning. Under the national direction of our Health Insurance Council organization, we have developed a network of representatives of the industry to take part in this activity in each of the states. Here, in Tennessee, Dudley Porter, Jr., Vice President, General Counsel and Secretary of the Provident Life and Accident Insurance Company, is serving as a member of Dr. Hopkins' Advisory Council. Messrs. James Powell, a member of the Board of Directors of Provident Life, and Stanyarne Burrows, Vice President, Administration and Personnel of Volunteer State Life, are coordinating the support of insurance company people for the planning efforts throughout the state.

To summarize, change is the central, all-pervading fact in the pattern for the future. It follows, then, that the management of change is the greatest challenge for each of us as individuals and for the organizations to which we belong. Nowhere is this more so than in the complex, sensitive, so-essential field of personal health care with which you and we are so vitally concerned. The partnership-for-health concept points the way. It contemplates a genuine and fruitful merger of public and private efforts for better health. It offers ample opportunity for participation by all interested groups. In the spirit of the often stated "Health is a Community Affair," it makes possible the resolution of change by the involvement of the community at the local level.

I am reminded of something I once heard, "There are three kinds of people in this world: the *observers*—who watch things happen; the *leaders*—who make things happen; and the *confused*—who stand around and wonder what happened."

You are the leaders. I am sure you will want to help make things happen by becoming personally involved. We welcome you in that capacity. We look forward to the opportunity of working together with you to improve the voluntary health care system and to achieve better public understanding of its unique advantages. Only in this way can we assure the maximum use by the public of the voluntary system to meet the health care needs of our society.

Thank you. It's been a real pleasure for me to visit your beautiful state again, and to share with you these few thoughts.

This disease is considered to be relatively rare in children. These eight cases encountered in one community makes one wonder how often a correct diagnosis may be missed.

Sarcoidosis: a Review and Report of Eight Cases in Children

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The appearance of sarcoidosis in children before the age of 15 years is rare. After McGovern and Merritt[1] reviewed the world medical literature from 1875 to 1953, they found only 104 cases of sarcoidosis occurring in children under the age of 15 years and over 3000 cases of sarcoidosis in adults. To these 104 cases, they added 9 cases which were studied in hospitals in Washington, D. C., from 1941 to 1950. In 1964, Beier and Lahey[2], reported 8 cases from the Utah-Idaho area. At this time, they reported that in the United States there previously had been only three series of cases of sarcoidosis occurring in children under 15 years of age of which such series of cases comprised more than 4 cases each. This included the 9 cases of McGovern and Merritt. The other two series of cases included 7 reported by Kendig[3] in 1962 from Richmond, Virginia, and 12 cases reported by Cones[4] from Duke Hospital in Durham, North Carolina, in 1948.

In this paper, the general subject of sarcoidosis will be discussed in relation to definition, incidence, etiology, clinical picture, serologic findings, immunologic abnormalities, diagnosis, treatment, and prognosis. This will be followed by the presentation of 8 cases of sarcoidosis diagnosed in children under the age of 15 years from the area in and around Knoxville. The period involved extended from 1955 to 1967.

Definition

In 1948, the Committee on Sarcoidosis of the National Research Council adopted the following definition for sarcoidosis,

"Pathologically sarcoidosis is characterized by the presence in any organ or tissue of epithelioid cells, of tubercules with inconspicuous necrosis or without necrosis, and by the frequent presence of refractile or apparently calcified bodies in the giant cells of the tubercules. The characteristic lesion may be replaced by fibrosis, hyalinization, or both. Clinically the lesions may be widely disseminated. The tissues most frequently involved are lymph nodes, lungs, skin, eyes, and bones (especially of the extremities). The clinical course is usually chronic with minimal or no constitutional symptoms. However, there may be acute phases with malaise and fever. There may be signs and symptoms referable to the tissue and organs involved. The intracutaneous tuberculin test is frequently negative. The plasma globulins are often increased. Spontaneous clinical recovery may occur without gross or radiographic evidence of residuals, or a continued chornic course may be present for years. In some cases functional involvement of involved organs may result."[1]

Incidence

Sarcoidosis is virtually world wide in distribution.[5,6] National prevalence rates of sarcoidosis vary widely from country to country and among different ethnic groups in the same country. The highest prevalence rates in the course of an international survey were recorded in Sweden, i.e., 64 per 100,000.[6] For no discernible reason, prevalence rates varied widely from one area of Sweden to another, ranging from as little as 4.0 to as much as 137 per 100,000 population.

In the United States, the incidence has been quoted as 11 cases per 100,000.[5] In certain Negro neighborhoods in New York City, however, an incidence of up to 70 per 100,000 has been reported.[6] In Louisiana, a similar incidence (71 per 100,000) has been found, while even higher rates occur in other Southeastern states where the largest percentages of sarcoid patients in American series originate.

In the United States, most series have shown a marked increase in incidence of the disease among Negroes. Sarcoidosis has been reported from three to eighteen times more frequently among Negroes than among whites.[5] There is also a tendency to have a more symptomatic form of the disease with a poorer prognosis among Negroes. In the United States, sarcoidosis is more common among the Negro female

than the Negro male, but this sex distribution is not true of the white population.

The peak prevalence of sarcoidosis occurs between the ages of 20 and 40 years.[6] Sarcoidosis occurring before the age of 15 years is rare.[1] On a world wide basis, the disease appears to affect about equally males and females and rural and urban dwellers.[6]

After Hagerstand and Linell[7] reported their findings on 6,706 consecutive autopsies, they came to the conclusion that the incidence of sarcoidosis was about 10 times that which one would expect from clinical figures. The number of multiple cases occurring in a single family has been estimated at 3.5 per cent.[8] Occurrence in husband and wife has been extremely rare.[5]

Etiology

The etiology of sarcoidosis is unknown. Among causes that have been considered are tuberculosis, leprosy, leishmaniasis, trauma, scar formation, faulty metabolism of iron, foreign body reaction to silica, viruses, bacterial agents, syphilis, asbestosis, histoplasmosis, zirconium, beryllium, pine pollen, hair spray, and certain soil types.[1,5]

Clinical Picture

In sarcoidosis, the intrathoracic area is the most commonly involved area. More than 90% of the patients with sarcoidosis show radiographic thoracic changes indicative of pulmonary or mediastinal involvement.[9] Up to 60% of these cases may be asymptomatic.[5] Hilar and mediastinal lymphadenopathy, the most common intrathoracic abnormality, occurs in about 70% of the patients.[8] This is almost always bilateral and most prominent on the right. These nodes, in spite of their sometimes large size, very rarely produce atelectasis or caval obstruction. Calcification of these nodes rarely occurs. If only hilar adenopathy is present, the prognosis in these cases is considered to be very good with 72 to 84% of the patients progressing to complete radiographic clearing in 5 years or less. When the pulmonary parenchyma is involved, the patient tends to have symptoms such as cough, dyspnea on exertion, occasional hemoptysis ,and chest or shoulder pain. The x-ray picture may range from a mild accentuation of in interstitial markings to films resembling bronchopneumonia, metastatic tumors, and milary tuberculosis. While parenchymal involvement is almost always bilateral, there is a tendency in this involvement to spare the apices and the extreme bases. Up to 19% of the cases with parenchymal involvement develop permanent fibrotic changes. Emphysema may accompany these fibrotic changes. Endobronchial involvement which is usually asymptomatic generally shows no significant x-ray changes. When bronchial obstruction occurs, it is almost always due to endobronchial lesions rather than extrinsic pressure from lymphnodes. Only very rarely does sarcoidosis lead to pleural involvement with effusion. When pleural effusion occurs, other conditions such as tuberculosis, malignancy, and congestive heart failure should be considered.

Peripheral lymphadenopathy is usually considered to be the second most common manifestation of sarcoidosis and occurs in about 73% of the patients.[8] The cervical nodes are probably the most frequently affected. These nodes tend to be rubbery, nontender. nonsuppurative, and discrete, rather than matted. They are usually slightly enlarged and shotty.

Cutaneous manifestations of sarcoidosis occur in about 32% of the patients.[8] The characteristic lesion is brown to violaceous in color. It is usually maculopapular in appearance with a special tendency to appear on the face.[5] However, the extremities, the neck, and the trunk are often affected. Other relatively common cutaneous forms of sarcoidosis are the deep subcutaneous nodules of the Darriere-Roussy type, erythema nodosum, and lupus pernio. Rare manifestations of sarcoidosis are erythrodermas, alopecia, ulcerative and vesicular lesions. Among Europeans and white patients in the United States, erythema nodosum appears frequently and has been considered a good prognostic sign. With the exception of erythema nodosum, Negroes appear more prone to develop cutaneous lesions than whites.

Involvement of the eye occurs in about 25% of the patients with sarcoidosis.[10] Anterior uveitis is the most common manifestation of sarcoidosis. Anterior uveitis

consists of both acute and chronic iridocyclitis. Acute iridocyclitis usually has an abrupt onset. Chronic iridocyclitis usually occurs in an older age group. With chronic iridocyclitis, there is no evidence of acute inflamation in the anterior chamber, but there are fatty granulomatous nodules attached to the iris and post-corneal surface, synechia sticking iris to lens, and lens opacties. While there are virtually no complications in acute iridocyclitis, chronic iridocyclitis progresses toward further fibrosis with the production of secondary glaucoma, cataract formation, and ultimate blindness. Acute iridocyclitis is associated with transient intrathoracic lesions and transient skin lesions (commonly erythema nodosum). Chronic iridocyclitis is associated with pulmonary fibrosis, chronic persistent skin lesions (commonly lupus pernio), and with bone cyst which constitutes the hallmark of chronic sarcoidosis. In the presence of anterior uveitis, posterior uveitis is difficult to visualize, and is, without a doubt, more common than is realized. When phlyctenular conjunctivitis occurs in adult life, it is more likely due to sarcoidosis than to tuberculosis. Keratoconjunctivitis sicca is the most distressing type of conjunctivitis. There are certain well defined clinical syndromes of sarcoidosis with eye involvement. Acute iritis, erythema nodosum, and bilateral hilar adenopathy have a benign self-limiting course with an excellent prognosis for complete resolution within one year. With chronic iridocyclitis, lupus pernio, bone cysts, and pulmonary fibrosis, irreversible fibrosis has occurred in all involved tissues. Ultimate resolution is unlikely to occur in these cases. While systemic corticosteroids provide symptomatic relief, they do not lead to resolution of the pathologic process. Sjögrens syndrome may be mimicked by keratoconjunctivitis sicca with or without parotid and lacrimal gland involvement. While there is dryness of the eyes and mouth, there is no joint involvement. Eventual resolution may be anticipated, but keratoconjunctivitis sicca may persist for several years. Heerfordt's syndrome is characterized by Bell's palsy anterior uveitis, and parotid gland enlargement. It is worth treating such cases with early and vigorous corticosteroids.

Clinical evidence of hepatic involvement occurs in from 20 to 33% of the patients with sarcoidosis.[5] At autopsy, however, as many as 65% of the patients show histologic evidence of hepatic infiltration. Abnormalities of hepatic chemical functions are not unusual. Rarely does severe hepatic decompensation occur and death from liver failure is almost never seen. Biliary obstruction secondary to enlarged periportal nodes is an uncommon but severe complication.

Twenty per cent of the patients with sarcoidosis show evidence of splenic involvement.[5] Rarely are severe complications due to hypersplenism found. Mild to moderate leukopenia and anemias are probably manifestations of hypersplenism. At autopsy, as much as 77% of the cases show histologic evidence of sarcoidosis in the spleen.

The incidence of osseous involvement has been reported to be from 5 to 26 per cent.[6] The characteristic osseous lesion is that of "punched-out" areas of the distal phalanx with erosion of cancellous bone and with an intact cortex. These lesions are often asymptomatic. Early radiographic changes may not be typical and may show only a lace-like pattern or longitudinal streaking. Involvement of the bones of the hands and the feet are common, but changes may also occur in the long bones, the pelvis, the skull, and the vertebrae. There is often surprisingly little pain compared to the degree of damage present, even when bony destruction has progressed to severe mutilation. Although arthralgia and migratory polyarthritis are not uncommon, there is seldom radiographic evidence of joint involvement. Occasionally x-ray studies do show narrowing of the joint space and cartilaginous destruction. With involvement of the hands, sometimes there appear firm nodules at the interphalangeal joints. These may present a remarkable symmetry. A knotty appearance may be imparted to the affected fingers and hands. Scaling of the skin occurs over these projections. There is usually neither pain nor tenderness associated with this nodular enlargement, but tightness and stiffness do occur.

Unilateral or bilateral enlargement of the parotid occurs with about equal frequency. Parotid enlargement is often associated with lassitude, fever, gastrointestinal upset, night sweats, and joint pains. The symptoms may preceed the parotid enlargement by several days or weeks. The parotid enlargement may last for weeks or months.

Neurologic manifestations which arise rarely, may be diverse and are potentially lethal. Involvement of the central nervous system. meninges, cranial and peripheral nerves occurs. The most frequent manifestation is palsy of the seventh nerve. Clinical manifestations of involvement of the central nervous system may include seizures, hemiplegia, diabetes insipidus, hydrocephalus, Parkinsonism, multiple sclerosis-like syndrome, as well as symptoms mimicking tumors in any part of the central nervous system. Differential diagnosis may be extremely difficult as there may be little or no evidence of sarcoidosis elsewhere in the body. Findings in the cerebrospinal fluids are nonspecific. Frequently there is an elevation of the cerebrospinal fluid protein, a mild to moderate pleocyctosis, and occasionally a decrease in sugar.

Clinical evidence of myocardial involvement occurs in about 1 to 2% of the cases with this disease.[9] Twenty per cent of the cases at autopsy show evidence of myocardial granulomas. The most common manifestations of myocardial sarcoidosis are tachycardia and nonspecific electrocardiographic changes. Left bundle branch block, atrial fibrillation, varying degrees of heart block, and congestive heart failure may be seen.

Clinical evidence of renal involvement occurs in nearly 4% of these patients.[5] At autopsy, approximately 23% of the patients show histologic evidence of sarcoidosis. Basically, two types of pathologic changes occur in the kidney. The first is caused by damage due to hypercalcemia with nephrocalcinosis and uroliathiasis. The second is due to damage produced by infiltration of the renal parenchyma by sarcoidol granuloma. These processes may progress to severe renal insufficiency and death. On occasions, other parts of the genitourinary system may show evidence of sarcoidosis, e.g., the prostate, the testes and the epididymis.

Involvement of the skeletal muscles at times occurs and produces symptoms of weakness or myalgia.

Rarely, involvement of the gastrointestinal tract, the thyroid, the adrenals, and the ovaries occur in patients with sarcoidosis. Although the syndrome of sarcoidosis, psoriasis, and gout has been described, it is extremely rare.

Pregnancy has a relatively favorable effect on the course of sarcoidosis. It is an established fact that serum corticosteroids are elevated during pregnancy, and these changes in the levels of corticosteroids may be the pertinent factor of the resolution of sarcoidosis with pregnancy. The rate of relapse of sarcoidosis in the postpartum period, however, is greater than one would expect in the nongravid patient.[11]

Serologic Findings

The most common laboratory abnormality in sarcoidosis is an elevated sedimentation rate. This is found in almost two-thirds of the patients.[8]

Forty-seven per cent of the patients with sarcoidosis show an elevation of the serum protein,[8] and this elevation usually is due to an increase in the globulins. A decrease in the albumin fraction may occur. A step-like electrophoretic pattern often occurs with an elevation of alpha-2, beta, and gamma globulin, but this is not pathognomonic for sarcoidosis.

Up to 35% of the patients show an elevation of alkaline phosphatase.[8] In many this is probably due to hepatic and osseous involvement, even when it is not clinically apparent.[5] Forty-five per cent of the cases show a positive cephalin flocculation test. This is probably related to liver damage and/or protein abnormalities.

Leukopenia occurs in as many as 31% of patients.[8] Anemia also is found in about 31% of the patients. These abnormalities are frequently due to hypersplenism, but this may not be the only explanation. Eosinophilia occurs in a small number of patients.

Twenty to 30% of the cases in the United States show hypercalcemia.[13] When this is severe, anorexia, vomiting, muscle weak-

ness, polyuria, renal failure, and eventual death may result. The hypercalcemia does not appear to be either induced by bony involvement or related to serum protein abnormalities. One possible explanation for this hypercalcemia is an increased sensitivity to vitamin D. Patients with sarcoidosis with a hypercalcemia not only show a hypercalciuria but also a low fecal calcium. This probably indicates an increase in the absorption of calcium from the gastrointestinal tract. Administration of vitamin D to these patients further lowers the fecal calcium. Corticosteriod therapy raises the fecal calcium level. That hypercalcemia is noted more frequently in the summer months in sarcoidosis patients gives further support to the theory of hypersensitivity to vitamin D. A second possible explanation concerning the etiology of this hypercalcemia is an increased sensitivity to parathormone. It has been shown that the administration of parathyroid extract in small doses can produce hypercalcemia in sarcoid patients while having no effect on normal patients.

Immunologic Abnormalities

Patients with sarcoidosis frequently lose the delayed type of cutaneous hypersensitivity.[5] From 72 to 94% of sarcoid patients have tuberculin tests which are negative.[8] This loss of cutaneous hypersensitivity is also seen with oidiomycin, trichophytin, pertussis, and mumps.

Immediate type reactions have not been found to be altered in sarcoidosis. The ability of sarcoid patients to produce circulating antibodies appears not to be affected, and there is evidence that in some cases sarcoid patients produce increased amounts of circulating antibodies.[5]

Diagnosis

There is no single study available to establish the diagnosis of sarcoidosis. The establishment of a diagnosis depends upon: (1) a clinical picture consistent with that of sarcoidosis, (2) histologic evidence of granuloma formation of the sarcoid type, and (3) a positive Kveim test. The finding of any two of these three factors is sufficient evidence to make a diagnosis of sarcoidosis.

The clinical picture of sarcoidosis can be mimicked by a number of diseases. Among these diseases are tuberculosis, lymphoma, leprosy, the deep mycosis, berylliosis, and silicosis. The finding of histologic evidence suggestive of sarcoid granulomas is not sufficient evidence alone to make the diagnosis of sarcoidosis. Granulomas almost indistinguishable from those of sarcoidosis can occur in the above mentioned diseases, as well as in lymphnodes draining carcinomas, in hepatitis, in zirconium sensitivty, in periarteritis nodosa, and in sites of trauma. With the Kveim test, a small percentage of false positive studies result; but more importantly, even in large centers with the best of material, positive reactions are obtained in only 75 to 80% of the patients with sarcoidosis.

The clinical picture has been described earlier in this paper. The characteristic microscopic picture is the so-called "naked tubercule." This consists of islands of epithelioid cells intermingled with histiocytes, lymphocytes, and Langhan's giant cells. A trace of lymphocytic cuff may be present but this does not develop as fully as in a true tuberculosis granuloma. The term "naked tubercle" comes from this lack of a fully developed lymphocytic cuff. In about 5 to 10% of sarcoid granulomas, there is found the presence of Schaumann or asteroid bodies although these are not specific for sarcoidosis. As the lesion ages, fibrosis develops beginning peripherally and progressing towards the center until it is virtually converted into a cicatricial mass.

The most accessible organ for biopsy to establish the diagnosis of sarcoidosis is the skin. About 32% of the patients with sarcoidosis will have cutaneous manifestations of the disease. The classical lesions have been described earlier. However, it should be pointed out that there are two types of scar sarcoid that develop.[13] The first group is that of old post-traumatic scars, and the second group is that of post-operative scars. If a generalized sarcoidosis develops, these scars may become swollen and red. Occasionally, postoperative scars are misdiagnosed as keloids, but histologically they are proven to be sarcoidosis. If a biopsy of the scar reveals a "foreign body reaction," there is good reason to suspect that the patient has sarcoidosis. Eighty-eight per cent

of the cases with cutaneous manifestations will yield positive biopsies.[5] To biopsy the lesions of erythema nodosum is not recommended, as these yield non-specific histologic studies.

Seven of eight patients with palpable lymphadenopathy will yield histologic evidence of sarcoidosis. The biopsy of epitrochlear nodes is preferred. However, cervical, inguinal, and axillary node biopsies are worthwhile.[14] Subcutaneous nodules, lesions of the conjunctival mucosa, and enlarged parotid glands provide other accessible sites for biopsy.

Approximately 40% of the cases of sarcoidosis will have no accessible abnormal structure for biopsy, or biopsy of these structures will have already given a negative result. Gastrocnemiusmuscle biopsy is a simple and rewarding technique if the patient has arthralgia or erythema nodosum. In the remaining cases, one has a number of choices. Lung biopsy, biopsy of the scalene fat pad, and liver biopsy are most widely used.

Intercostal pulmonary biopsy is the procedure of choice in patients with disseminated pulmonary lesions. This can be done under local or brief inhalation anesthesia. This procedure is only a little more formidable than biopsy of a scalene fat pad. Because of the greater productivity and greater specificity of intercostal biopsy, it is to be preferred in patients with pulmonary lesions.

If only hilar adenopathy is present and there is no parenchymal involvement, biopsy of a scalene fat pad or needle biopsy of the liver is preferred Although it is a more formidable procedure, a thoracotomy is equally safe and more definitive than biopsy of a scalene fat pad or needle biopsy of the lesion.

Siltzbach reports that 40% of the patients in the early phase of intrathoracic sarcoidosis whose x-rays show only hilar adenopathy without parenchymal involvement will yield positive bronchial biopsies.[15] Seventy-nine per cent of the patients yield abnormal biopsies when hilar adenopathy and pulmonary shadows are present, and 60% show sarcoid granulomas even after hilar adenopathy has subsided and only pulmonary opacities persist. These microscopic lesions of sarcoidosis may persist for years after the x-ray image of sarcoidosis has disappeared spontaneously or following corticotherapy.

Random biopsy of the palate has been carried out with a yield of 38% positive results[15]. The palate in these cases appears grossly normal, and the yield of positive biopsies is about the same in the acute and the subacute phase.

Israel and Sones[14] have recommended the following approach for selection of biopsy procedure.

1) Cutaneous sarcoid present	1) Punch biopsy
2) Subcutaneous nodule or lymph node palpable	2) Excision
3) Erythema nodosum or arthralgia present	3) Gastroenemius biopsy
4) Pulmonary lesions present	4) Intercostal pulmonary biopsy
5) Hilar adenopathy only	5) Liver biopsy, anterior thoracotomy or scalene fat pad biopsy

The Kveim test is the third major diagnostic criterion for establishing the diagnosis of sarcoidosis. This consists of the intradermal injection of 0.1 to 0.2 ml or a 10% suspension of sarcoid tissue. A positive reaction consists of the development of a red-purple papule in the area of injection in a week or two. This tends to grow slowly for 4 to 6 weeks until it reaches its maximal size of 3 to 8 mm in diameter. After this time, the lesion tends to wane and eventually results in a brownish macule or a pigmented scar. Biopsy of this lesion should be carried out at the time it reaches its maximal size. If it were not for the admixture of inflammatory cells, the Kveim reaction would be very difficult to differentiate from cutaneous sarcoid.

Siltzbach's findings on a "world-wide" test of the Kveim test reported that approximately 50% of the patients with a biopsy-confirmed sarcoidosis had a positive Kveim test.[16] Fifty-eight per cent of the patients in the subacute stage and 42% in the chronic group developed a positive test. Sixty per cent of the patients with hilar adenopathy alone showed a positive Kveim test. Fifty-five per cent of the patients

under 40 years of age yielded a positive reaction, whereas only 43% over 40 years of age responded.

Treatment

At the present time, only two drugs seem to retain any favor in the treatment of sarcoidosis.[17] These drugs are the corticosteroids and the antimalarials.

Corticosteroids, both in local and systemic forms, have been employed effectively. Cutaneous sarcoids have responded to intralesional injection of a small amount of corticosteroids while the topical applications of cream and ointments have little effect. Systemic administration of corticosteroids is capable of producing dramatic regression of virtually all of the clinical, the laboratory, and the radiographic manifestations of sarcoidosis. This action, however, is suppressive rather than curative. If the administration of corticosteroids could be shown to prevent the development of pulmonary fibrosis, their administration would be indicated in all cases of sarcoidosis. Only in cases of subacute iridocyclitis can it be shown that the admnistration of corticosteriods prevents the progression of the disease.[17] Daily doses of from 20 to 60 mg of prednisone (or its equivalent) are administered orally, and the duration of therapy may range from a few months to a year or more.

Because of the hazards associated with the administration of large and/or prolonged doses of corticosteroids, their uses should be restricted to the following indications.[5]

(1) Involvement of a vital organ such as the central nervous system or heart.

(2) Acute or subacute occular involvement.

(3) Persistent hypercalcemia or hypercalciuria.

(4) Progressive parenchymal involvement as shown by increasing symptoms, radiographic changes, or impaired or deteriorating pulmonary function.

(5) Acute or subacute illness with constitutional symptoms such as weight loss, fever, malaise, liver dysfunction, and hypersplenism.

(6) Progressive and disfiguring skin lesions.

Chloroquine may be considered the second drug of choice in the treatment of sarcoidosis.[18] Its chief value lies in its ability to suppress cutaneous lesions. Chloroquine appears useful also in the treatment of persistent sarcoid lesions localized to nonvital organs such as the salivary and the lacrimal glands and the peripheral lymphnodes when they are troublesome. It is also worth a trial in patients with mild or no respiratory symptoms whose pulmonary lesions show progressive radiographic changes. Because of the occasional serious ocular complications of chloroquine therapy, periodic examinations for coroneal and retinal changes are mandatory. Chloroquine therapy should be limited to six months to reduce the chance of irreversible ocular damage. Several months should elapse between successive courses. The dose of chloroquine should be 250 mg twice a day. Relapse within two months following the cessation of chloroquine therapy is not uncommon.

Prognosis

Sones and Israel[19] have stated that sarcoidosis is neither as benign as some report, nor as malignant as others have reported. They found survival rates of 88.5% in 5 years of observation and 84.5% after 10 years.

Case 1. This 9 year old white boy was admitted to St. Mary's Memorial Hospital on July 11, 1955 and was discharged from the hospital on July 19.

He was admitted to the hospital for biopsy of a large indurated mass involving the right buttock. This mass was freely moveable and extended from the mid gluteal area into the perineal area. The patient's spleen and liver were palpable. In the right inguinal area were some enlarged, bean size, nontender lymphnodes. The left inguinal lymphnodes were also palpable, but these nodes were not as large as the right inguinal lymphnodes. A few shotty cervical lymphnodes were palpable. A chest x-ray revealed some increase in the bronchovascular markings bilaterally, but the hilar shadows were not increased in prominence. Hgb was 12.8 gm. A WBC count was 7,600 with 46% lymphocytes, 2% monocytes, and 52% PMN. Urinalysis revealed no abnormality. A platelet count was 241,000, and bleeding and clotting times were 2 minutes and 6 minutes 5 seconds respectively. A histoplasmosis skin test and a skin test for tuberculosis (P.P.D. No. 1) were negative.

Biopsy of the mass involving the buttock and excision of inguinal lymphnodes revealed histologic findings compatible with sarcoidosis.

Case 2. This 12½ year old white boy was admitted to St. Mary's Memorial Hospital on April 2, 1956 and was discharged from the hospital on April 21.

The patient was admitted to the hospital because of bilateral painless, enlargement of the parotid glands of some three to four weeks duration. The patient also had some enlargement of his submaxillary glands. The supraclavicular lymphnodes on the left side were palpable. The axillary and inguinal lymphnodes were not palpable. There was no enlargement of the spleen or liver. No abnormality of the facial nerve was detected. Fundoscopic examination revealed bilateral papilledema. Vision in the right eye was 20/20, but in the left eye it was 20/70. The patient gave a vague history of frontal headaches. A chest x-ray revealed extensive, bilateral, hilar lymphadenopathy. This lymphadenopathy was most prominent on the right side. The x-rays of the hands, the skull, and a flat film of the abdomen revealed no abnormality. Hgb was 13.6 gm. A WBC was 9,000 with 52% lymphocytes, 8% monocytes, 2% PME and 38% PMN. Serum calcium was 10.2 mg.; total protein, 8.37 gm with 5.3 gm of albumin and 3.07 gm per 100 ml globulin. An ESR was 40 mm in one hour. Urinalysis revealed no abnormality. Heterophil examination for infectious monomucleosis was negative. Skin test for tuberculosis (P.P.D. No. 1) and histoplasmosis skin tests were negative.

Biopsies obtained from the left supraclavicular lymphnodes and the left submaxillary gland revealed histologic findings compatible with the diagnosis of sarcoidosis.

Case 3. This 12 year old white girl was admitted to St. Mary's Memorial Hospital on Aug. 10, 1956 and was discharged from the hospital on Aug. 12. She was admitted with the chief complaint of a cough of 1 month's duration. The cough was nonproductive and was worse in the morning. In addition, the patient complained of occasional "fainty" sensations. She had occasional pain in the lower anterior chest on deep inspiration, and had lost 4 to 5 pounds.

Physical examination revealed that the midposterior cervical nodes were palpable bilaterally. The abdomen was negative to palpation. There was a soft systolic murmur heard over both basal areas, and P2 was thought to be a little louder than A2. The mediastinum was thought to be widened at fluoroscopy examination. X-rays of the hands revealed no abnormality. Hgb was 11.5 gm, WBC was 10,400 with an essentially normal differential. An ESR was 24 mm. in one hour. Heterophil agglutination test for infectious mononucleosis was positive through dilutions 1 to 28. A fever agglutination test was negative except for a typhoid titer of 1 to 80. Urinalysis was essentially negative. Plasma protein electrophoresis disclosed slight Alpha 2 hyperglobulinemia. A purified protein derivative (P.P.D. No. 2) skin test for tuberculosis and a histoplasmosis skin test were negative. Removal of a right scalene lymphnode revealed findings compatible with the histologic diagnosis of sarcoidosis.

Case 4. This 13 year old Negro boy was admitted to the University of Tennessee Memorial Hospital on July 7, 1958 and was discharged on July 10.

Two months earlier, the patient had been hospitalized at a tuberculosis sanatorium because of hemoptysis. Upon admission to the sanatorium, the chest x-ray was reported to show some abnormal lung shadows and pleural effusion. Studies for tuberculosis were negative and the patient was discharged. Because of persistent abnormal chest x-rays, the patient was referred to the University of Tennessee Memorial Hospital. On admission, the patient reported that he felt well. However, he had a cough which was productive of white mucoid material, and some shortness of breath with exertion. He had had night sweats on several occasions. Examination revealed some firm, shotty, palpable, epitrochlear, inguinal, and axillary lymphnodes. The chest x-ray revealed extensive nodular disease throughout both lung fields suggestive of miliary disease. There appeared to be some increase in the size of the lymphnodes at the hilum on the left side. The ESR was 17 mm in 1 hour. A WBC was 11,700 with 65% PMN, 25% lymphocytes, 6% monocytes, 3% PME, and 1% PMB. Urinalysis revealed no abnormality. Tuberculin skin and a histoplasmin skin tests were negative. Bronchoscopy examination revealed a generalized redness of the bronchial mucosa. A small amount of mucopurulent material was present. A biopsy of the scalene fat pad revealed findings compatible with the histologic diagnosis of sarcoidosis.

Case 5. This 9 year old white girl was admitted to St. Mary's Memorial Hospital on Nov. 24, 1965 and was discharged on Nov. 31. The patient's chief complaint was severe, intermittent bouts of abdominal cramping of some 3 to 5 years' duration. The patient had a poor appetite and persistent cough.

Examination revealed a poorly nourished, pale, white girl. A few shotty anterior and posterior cervical and supraclavicular lymphnodes were palpable bilaterally. The liver and spleen were not felt. Chest x-ray revealed extensive bilateral hilar lymphadenopathy and widening of the superior mediastinal shadow. The trachea was displaced and probably slightly compressed at the level of the right paratracheal lymphadenopathy. The lung fields were otherwise negative. A barium enema and a G.I. series were within normal limits. Hgb was 16.4 gm. A WBC was 11,800 with 24% lymphocytes, 2% monocytes, 2% PME, and 72% PMN. The ESR was 16 mm in 1 hour. Urinalysis revealed no abnormality. A heterophil agglutination for infectious mononucleosis was negative. The EKG showed right axis deviation. A tine test for tuberculosis was negative. A biopsy of a scalene node on the right side revealed histologic evidence compatible with sarcoidosis.

Case 6. This 13 year old white boy was admitted to St. Mary's Memorial Hospital on Jan. 22,

1967 and was discharged on Jan. 25. His chief complaint was nonproductive cough of 1 month's duration. A chest x-ray before admission revealed bilateral hilar lymphadenopathy, more prominent on the right side.

Examination revealed hypertrophy of the right tonsil which was twice the size of the left tonsil. The anterior cervical lymphnodes were moderately increased in size but nontender. There were several palpable, small, shotty, posterior cervical, suboccipital, and epitrochlear lymphnodes. The thyroid gland was palpable but not pathologically enlarged, of normal consistency, and not tender. Liver and spleen were not palpable. PCV and Hgb were within normal limits. A WBC count was 7,600 with 47% PMN, 42% lymphocytes, 7% monocytes, and 4% PME. The ESR was 11 mm. Urinalysis revealed no abnormality. Skin tests for tuberculosis (P.P.D. No. 1 and P.P.D. No. 2) and histoplasmosis were negative. Serum protein electrophoresis, serum calcium, serum phosphorus, and serum alkaline phosphatase were at normal levels. Uric acid levels were elevated twice, 8.4 mg. and 7.7 mg. per 100 ml. (The patient's father also has persistent hyperuricemia.) Bronchoscopy revealed edema and redness of the bronchial mucosa bilaterally. Biopsy of the scalene fat pad and multiple biopsies of the bronchial mucosa revealed findings compatible with the histologic diagnosis of sarcoidosis.

An interesting item associated with this illness is that this patient's father has at his place of business a 50 year old Negro female employee in whom the diagnosis of sarcoidosis was established 2 years before. The patient has had little or no contact with this employee.

Case 7. This 13 year old white boy was admitted to East Tennessee Children's Hospital on July 13, 1967 and was discharged on July 26. The chief complaint was anorexia and weight loss of 6 months' duration.

Examination revealed fairly large, palpable right and left supraclavicular lymphnodes. Chest x-ray revealed increased prominence of the interstitial markings throughout both lung fields, most prominent centrally. The hilar areas appeared enlarged and there seemed to be some widening of the mediastinum suggestive of lymphnode enlargement. The PCV was 42% and the Hgb, 12 gm. The ESR was 12 mm. in 1 hour. The WBC count was within normal limits, and the differential picture was not abnormal. A platelet count was 328,000. A heterophil agglutination for infectious mononucleosis was negative. Urinalysis revealed a trace of albumin, many coarsely granular casts and 10 to 15 WBC per hpf with small clumps of WBC. An intravenous pylogram revealed a hydroureter on the right side extending to a point overlaying the sacrum. A retrograde pylogram revealed findings compatible with extrinsic pressure on the lower ureter which was thought to be due either to a vascular abnormality or pressure from enlarged lymphnodes. Serum calcium was 10.8 mg, total protein 7.32 gm with 4.92 gm of albumin and globulin 2.50 gm for 100 ml. Skin tests for tuberculosis (P.P.D. No. 1 and P.P.D. No. 2) and a histoplasmosis were negative. Excision of a lymphnode in the left supraclavicular area revealed findings compatible with the histologic diagnosis of sarcoidosis.

Case 8. This 14 year old white girl was admitted to St. Mary's Memorial Hospital on July 30, 1967 and was discharged on Aug. 3. The patient was admitted because of bilateral enlargement of the parotid glands and marked cervical lymphadenopathy of 2 to 3 months' duration.

Examination also revealed palpable bilateral axillary and inguinal lymphnodes. The tip of the spleen was palpable; the liver was not palpable. Chest x-ray revealed slight prominence of the peritracheal nodes on the right side, and an infiltrate throughout both lung fields. The PCV was 42%, the Hgb 13.4 gm and the WBC count 5,800 with 35% lymphocytes, 6% monocytes, 4% PME eosinophils, and 55% PMN. Urinalysis was normal except for 60 to 70 WBC per hpf. Heterophil agglutination for infectious mononucleosis was negative. Serum calcium was 12.8 mg. per 100 ml. A tuberculin and a histoplasmin skin test were negative. An excisional biopsy of a left supraclavicular lymphnode revealed histologic evidence of sarcoidosis.

Summary

The general subject of sarcoidosis has been discussed. This has been followed by the presentation of 8 cases of sarcoidosis occurring in children under the age of 15 years. The cases were collected from cases hospitalized in Knoxville, Tennessee. The period involved extended from 1955 to 1967.

Acknowledgments. I wish to express my thanks to the following doctors for giving me their permission to present their cases of sarcoidosis: Dr. Richard Sexton, Dr. C. L. Chumley, Dr. Robert Gilbertson, Dr. Charles Seinknecht, Dr. David Waterman, Dr. Sheldon Domm, Dr. William Rogers, Dr. George E. Fillmore, Dr. Jacob Bradsher, Dr. Bill Swann, Dr. Charles G. Peagler, Dr. Harvey Coker, Dr. Bruce McCampbell, Dr. Mark Fecher, and Dr. George Zirkle.

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AMA Provides Services To Consumer Magazines

Where do authors of magazine articles on medicine and health get the information for their stories? Most of them turn to the American Medical Association's Magazine Relations Department.

This department, one of 10 in AMA's Communications Division, provides two services to magazine editors and writers and free-lancers:

1—Research materials from AMA's Archive-Library on any subject pertaining to health, medicine, the medical profession or the AMA.

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During 1967, more than 1,100 medical articles appeared in the nation's consumer magazines. The Magazine Relations Department responded to 818 requests for research materials and reviewed, before publication, 237 manuscripts. Not all magazines use AMA services, but the number that do is increasing each year.

Of the 1,100 articles, only 11 were considered "bad" when judged on research, writing, accuracy and objectivity. Another 12, in the opinion of AMA, did not contribute to a better public understanding of medicine and health. But nearly 99 percent of all the articles were considered excellent or good.

Most of the major magazines now use this service. In addition to the research and manuscript reading services, the department's director, secretary and part-time physician consultant handle hundreds of telephone calls a year from editors and writers. Several times a year the department director visits editors and writers. Fifty interviews also were arranged last year with AMA officers and other physicians.

At a recent meeting of the Society of Magazine Writers in New York City, a prominent editor said: "We have learned to look upon the American Medical Association as the most reliable, authoritative and competent source for information on health and all phases of medically related subjects." His remark was loudly applauded.

Magazine Relations Department also writes a monthly health column, "For Your Health's Sake" for 1,100 house organs and company publications. Health articles prepared in cooperation with the Council on Rural Health are mailed monthly to more than 450 farm and rural publications. (AMA News Release)

The author describes his success in the use of this new tetracycline in a variety of surgical infections.

Use Of Doxycycline In Surgical Infections—Report of 117 Case Studies With 13 Different Bacterial Origins

LOUIS G. BRITT, M.D.,* Memphis, Tenn.

The "golden age" of antimicrobial therapy began with the production of penicillin in 1941.[1] Since then systematic screening of soil specimens collected from various parts of the world has led to the discovery of a group of tetracycline antibiotics, which are characterized by a broad spectrum of high effectiveness against certain microorganisms, and with relative safety.[2]

Doxycycline (∝-6-deoxy-oxytetracycline) is a new broad-spectrum antibiotic derived synthetically from methacycline. Experimentally, doxycycline has been reported to be a potent tetracycline.[3] Its concentration in canine tissues after repeated oral administration was greater than that of the other tetracyclines tested.[4] A single maintenance dose of 100 mg daily after the first day is therapeutically effective with better patient acceptance.[5] The long plasma half-life of a single 100 mg oral dose of doxycycline, 15.1 hours, makes once-a-day regimen possible.[6]

The *in vitro* spectrum of doxycycline covers a variety of gram-positive and gram-negative bacteria. Tests against various microorganisms of recent clinical origin with 30-mcg discs confirmed this activity. Staphylococci and enterococci consistently displayed greater *in vitro* susceptibility to doxycycline than to tetracycline or demethylchlortetracycline.[8]

In a clinical pharmacologic comparison with demethylchlortetracycline, doxycycline produced slightly lower peak plasma levels at one-third the dosage in the fasting state. The 2-hour peak plasma level following a dose of 100 mg was 1.78 mcg per cc. The decline was slow and the level after 24 hours was still 0.65 mcg per cc.[6]

Ingestion of food or milk, which impairs the absorption of certain other tetracyclines, does not significantly influence that of doxycycline. Because of its relatively high plasma levels with small dosage, prolonged half-life, and the minimal influence of food on absorption, doxycycline shows promise as a new and improved tetracycline.[6] Its effectiveness on once-daily administration after the first day has been established in the treatment of chronic urinary tract infections[5] and in other clinical studies.

Present Study

Broad-spectrum antibiotics find extensive use in surgery because of the wide variety of infections encountered. The demonstrated effectiveness by the disc method of doxycycline against *Staphylococcus aureus* and *Streptococcus hemolyticus* in particular encourages its preferential use.

Surgical infections involve a heterogeneous group of patients making it impossible to set up adequate controls for a double-blind trial. It was decided, therefore, to conduct a straight clinical study and carefully record all of the data. The patients were treated in the hospital and out-patient service of the City of Memphis Hospital, Memphis, Tennessee.

Clinical Group Studied

Doxycycline** was administered to a group of 83 surgical patients, 45 male and 38 female, for the treatment of various infections within its antibacterial spectrum. The average age of the 65 adults was 44 years with a range of 15 to 98 years; of the 18 children, the average age was 7 years, with a range 7 months to 11 years.

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**Supplied as Vibramycin Hyclate (doxycycline hyclate) capsules equivalent to 50 mg. of doxycycline, also as Vibramycin Monohydrate (doxycycline monohydrate) dry powder for oral suspension, by Chas. Pfizer, Co., Inc. New York, N. Y. 10017.

Seventy-two of the patients were hospitalized.

The method of study consisted of history and physical examination with pretreatment cultures and sensitivity, CBC and urinalysis, and BUN and SGOT determinations. Further studies included repetition of the bacteriologic studies and blood and chemical determinations during and at the termination of therapy.

Since cellulitis and abscess coexisted in 33 cases and cellulitis and paronychia in 1, the project provided a total of 117 case studies. The infection was acute in 74 cases, chronic in 7, and recurrent in 2. The diagnosis was abscess in 43 cases (perirectal 5, subphrenic 1), cellulitis 42 (including 33 cases associated with abscess and 1 with paronychia), peritonitis 18, wound infection 7, infected burn 4, appendectomy 2, and paronychia 1. The temperature was elevated in 49 of the cases. Leukocytosis (WBC count 10,000 or above) was present in 47 cases before starting doxycycline treatment.

The usual adult dosage of doxycycline was 100 mg b.i.d. the first day followed by a daily maintenance dose of 100 mg. In children weighing 100 lb or less, the usual initial dose was 2 mg per lb of body weight divided into two doses on the first day, followed by a daily maintenance dose of 1 mg per lb. For children weighing more than 100 pounds, the adult dosage schedule was followed. In some cases, particularly very severe infections, the dosage schedule of the first day was maintained and not reduced.

Concurrent therapy consisted of local care (compresses, soaks, etc.) only in 63 cases, local care with incision and drainage in 4, and incision and drainage alone in 4. Sensitivity tests by the disc method were made with doxycycline and seven other antibiotics against specific bacteria isolated from cultures of the group, (Table 1). The antibiotic activity of doxycycline with respect to the 13 microorganisms isolated from the cultures was comparable to that of tetracycline and superior to penicillin, erythromycin and streptomycin. Neomycin, which ranked highest, is unsuitable for sys-

Table 1

Preliminary Susceptibility Tests
(Disc Method)

S—sensitive R—resistant

BACTERIA (isolated from cultures of the group	*Doxycycline*		*Tetracycline*		*Demethylchlortetracycline*		*Penicillin*		*Erythromycin*		*Chloramphenicol*		*Neomycin*		*Streptomycin*	
	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
Hemolytic staphylococcus aureus coagulase +	15	6	12	8	11	10	4	17	10	11	20	1	21	—	9	10
Hemolytic beta-streptococcus	8	—	8	—	8	—	8	—	8	—	8	—	7	1	5	1
Staphylococcus albus	2	—	2	—	2	—	2	—	2	—	2	—	2	—	1	—
Aerobacter aerogenes	2	3	4	1	4	1	—	5	—	5	3	2	5	—	4	1
E. coli	15	2	16	1	16	1	—	17	2	15	15	2	17	—	13	2
Pseudomonas aeruginosa	1	7	5	3	3	5	—	8	1	7	7	1	7	1	3	5
Streptococcus fecalis	3	—	2	1	3	—	2	1	3	—	3	—	3	—	3	—
Proteus	1	4	1	4	2	3	—	5	—	5	3	2	5	—	2	3
Paracolon	1	—	—	1	1	—	—	1	—	1	—	1	1	—	—	1
∞ - Streptococcus	—	1	—	1	1	—	1	—	1	—	1	—	—	1	—	1
Klebsiella pneumoniae	1	3	1	3	2	2	—	4	—	4	2	2	4	—	1	3
Hemolytic staphylococcus auerus coagulase —	8	1	9	—	9	—	4	5	8	1	9	—	9	—	9	—
Enterococcus sp.	1	—	1	—	1	—	—	1	—	1	1	—	1	—	1	—
TOTAL	58	27	61	23	63	22	21	64	35	50	74	11	82	3	51	27

temic administration because of its renal, neural and auditory toxicity.[10]

Doxycycline was very effective against beta-*Streptococcus hemolyticus, Staphylococcus aureus hemolyticus* and *E. coli*-Proteus, *Pseudomonas aeruginosa* and *Klebsiella pneumoniae* were more resistant.

Therapeutic Results

The results of treatment with doxycycline are shown in table 2, with the best results obtained in patients with cellulitis (86% good and 14% satisfactory) and abscess (84% good and 16% satisfactory).

Of the 49 patients with elevated temperature, 37 (76%) became afebrile after 48 hours of doxycycline treatment and 18 (37%) within 24 hours. Three patients became afebrile within 12 hours, 2 in 6 to 8 hours. The elevated temperature returned to normal in all but 1 case.

The bacteriologic response to doxycycline for each of the microorganisms isolated is shown in table 3. Significantly excellent results were obtained in infections due to *Staphylococcus aureus hemolyticus,* beta-*Streptococcus hemolyticus* and *Escherichia*

Table 2

Clinical Results of Doxycycline Treatment

Condition	*No. Case Studies**	*Good*	*Satisfactory*	*Poor*
Abscess	43	36 (84%)	7 (16%)	0
Cellulitis	42	36 (86%)	6 (14%)	0
Peritonitis	18	12 (67%)	4 (22%)	2 (11%)
Wound infection	7	5 (72%)	1 (14%)	1 (14%)
Infected burn	4	3 (75%)	0	1 (25%)
Appendectomy	2	2	0	0
Paronychia	1	1	0	0
TOTAL*	117	95 (81%)	18 (15%)	4 (4%)

CODE: *Good*—definite favorable response with prompt alleviation of symptoms
Satisfactory—beneficial response but duration of symptoms longer than expected with good response
Poor—no response or a worsening of symptoms
*In 33 cases cellulitis was complicated by an abscess and in 1 case by paronychia

Table 3

Bacteriological Classification of Clinical Results
Microorganisms Isolated from Cultures of the Group

Infecting Organism	*No. Cases*	*Good*	*Satisfactory*	*Poor*
Hemolytic Staphylococcus aureus coagulase +	21	20 (95%)	1 (5%)	0
Beta-Streptococcus hemolyticus	8	8 (100%)	0	0
Staphylococcus albus	2	2	0	0
Aerobacter aerogenes	5	4 (80%)	1 (20%)	0
E. coli	17	15 (88%)	1 (6%)	1 (6%)
Pseudomonas aeruginosa	8	4 (50%)	3 (37½%)	1 (12½%)
Streptococcus fecalis	3	2	1	0
Proteus	5	2 (40%)	2 (40%)	1 (20%)
Paracolon	1	0	1	0
∞ -Strep.	1	1	0	0
Klebsiella pneumoniae	4	2 (50%)	1 (25%)	1 (25%)
Hemolytic Staphylococcus aureus coagulase —	9	9 (100%)	0	0
Enterococcus sp.	1	0	0	0
No growth	2	2	0	0

CODE: *Good*—definite favorable response with prompt alleviation of symptoms
Satisfactory—beneficial response but duration of symptoms longer than expected with good response
Poor—no response or a worsening of symptoms

coli, confirming the validity of the preliminary susceptibility tests.

In 33 cases a comparison of the response to doxycycline with that of prior antibiotic therapy was possible. The records indicated that penicillin, procaine penicillin, streptomycin, chloramphenicol, tetracycline, oxytetracycline, ampicillin, cephalothin and kanamycin had been used in previous infections. The comparison provided a better response for doxycycline in 25 (76%) of the 33 cases, a poorer response in 4 (12%) cases, and the same response in 4 (12%). The details of the comparison are shown in table 4.

Side Effects

No side effects were observed in this group. It is believed that adverse reactions may occur but they are rare.

There were no significant changes in the SGOT (serum glutamic oxaloacetic transaminase) or BUN (blood urea nitrogen) values.

Summary

In a total of 117 case studies on a group of 83 patients with surgical infections due to 13 different microorganisms, the use of broad-spectrum doxycycline in the recommended dosage provided good results in 81% of the cases, satisfactory in 15%, and poor in 4 per cent. The best results were observed in cellulitis and abscess. The clinical response and the preliminary susceptibility tests rated highest with *Staphylococcus aureus hemolyticus,* beta-*Streptococcus hemolyticus* and *Escherichia coli.*

The antibiotic was well tolerated and no side effects were observed Food and milk did not interfere with its effectiveness.

The usual adult dosage schedule was 100 mg b.i.d. the first day, followed by 100 mg once a day for maintenance. For children weighing less than 100 pounds, the maintenance dose was 1 mg per lb up to 100 pounds with twice that amount on the first day.

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Table 4

Doxycycline Response Compared with Prior Antibiotics

Antibiotic	*No. Cases*	*Doxycycline better*	*Prior Antibiotic better*	*Same Response*
Procaine penicillin & streptomycin	7	6	1	0
Penicillin & streptomycin	7	6	0	1
Penicillin & chloramphenicol	7	3	2	2
Penicillin & tetracycline	4	3	0	1
Procaine penicillin & chloramphenicol	2	1	1	0
Cephalothin	1	1	0	0
Tetracycline	1	1	0	0
Oxytetracycline	1	1	0	0
Penicillin & kanamycin	1	1	0	0
Procaine penicillin & tetracycline	1	1	0	0
Ampicillin	1	1	0	0
TOTAL	33	25 (76%)	4 (12%)	4 (12%)

STAFF CONFERENCE

City of Memphis Hospital*

Scurvy

DR. GENE H. STOLLERMAN: Today our Grand Rounds is concerned with an old disease examined with a new wrinkle. Scurvy, a disease known to physicians since the dawn of reported medicine, is today being restudied with some modern methods of clinical investigation. With the tools of electron microscopy and detailed metabolic balance studies, we have gained some new insights into this fascinating disease. Today's case has afforded us the opportunity to make biochemical and ultrastructural observations that one is rarely privileged to see. The case will be presented by Dr. Stuart Brust and discussed by Drs. Daniel Copeland, Abbas Kitabchi and Ken Hashimoto.

DR. STUART BRUST: Present Illness: This is the case of a 65-year-old Caucasian male deaf-mute, who was admitted to the City of Memphis Hospital's emergency room for the first time on July 30, 1968. His *chief* complaint was weakness. This symptom had been progressing slowly over the past several months, and at the time of admission the patient was unable to care for himself. He had not eaten any appreciable amount of food during the past 2 weeks, and prior to this time his food intake consisted mainly of cottage cheese sandwiches, hamburgers and beer. The patient was edentulous and denied eating fresh fruit for the past several years. He had lived alone in a hotel room for 4 years.

Several days before admission the patient had fallen down a flight of stairs. Subsequent to his fall, numerous hemorrhagic areas had appeared on his legs.

Significant past history included an acute myocardial infarction in 1966. There had been no other hospital admissions.

Physical examination: The patient was an obviously malnourished, dehydrated white man in no acute distress. BP was 100/60, P 80, R 19, weight 115 lbs. height 65½ in. Examination of the skin revealed facial vitiligo, mild cheilosis, minimal follicular hyperkeratosis, weeping conjunctivae, and some "corkscrew" hairs on the lower extremities. Perifollicular petechiae were prominent over the extremities and hemosiderin deposits were noted in some perifollicular areas. There were marked ecchymotic areas and purpura over both thighs and calves. The patient was edentulous except for two incisors. The pupils were equally reactive to light; funduscopic examination was normal. There was a total conduction defect of hearing. The chest was increased in the A-P diameter, but no other pulmonary abnormalities were noted. Examination of the heart revealed a normal sinus rhythm without murmur and there was no sign of cardiomegaly. The testicles were atrophic. Rectal examination was negative. Neurologic findings included: diffuse motor weakness of all extremities: deep tendon reflexes 3+ and symmetrical; bilateral Babinski's signs. No other abnormalities were noted.

Laboratory Studies: The admission laboratory studies were: Hct 25%, RBC—normocytic, normochromic; WBC—2,170 with 56 segmented polys, 6 eosinophils, 1 basophil, 31 lymphoctytes, and 6 monocytes. The bleeding time was 8 minutes and 30 seconds; the partial thromboplastin time, prothrombin time, and capillary fragility tests were normal. Blood chemical levels were: bilirubin, 2.7 mg%, 1.7 mg% direct; protein, 7.1 gm, 3.8 gm% albumin; BUN, 53 mg; urinalysis: 1 WBC and 3 RBC per hpf; glucose, protein, acetone were negative; specific gravity was 1.022. Further laboratory studies revealed a plasma ascorbic acid level of .22 mg% (normal, 0.7—1 mg%); plasma cortisol—15 mcg per 100 ml (normal, 15 to 22 mcg per 100 ml). Urinary ketosteroids, 3.6 mg per 24 hours. Urinary ketogenic steroids, 7.8 mg per 24 hours. The ascorbic acid loading test of 125 mg. administered intravenously in 500 ml of 5% dextrose in normal saline resulted in less than 1% excretion of the ascorbic acid during the next 24 hours (normal, 50 to 60%). Radiologic studies revealed minimal osteoporosis of the lower extremities and several well healed rib fractures. EKG showed a left axis deviation, otherwise normal.

Course in Hospital: The patient was maintained on a low ascorbic acid diet. With this increase in nourishment, there was gradual clearing of the purpura and perifollicular petechiae. The patient's strength returned and his sense of well being improved. The hematocrit rose to 33%, the BUN decreased to 9 mg per 100 ml.

DR. G. DANIEL COPELAND: Scurvy is a deficiency disease with unusual historic interest. This disease was described during the Seventh Crusade in the army of King Louis of France, whom we now call St. Louis. It is almost certain that the scurvy described in the thirteenth century was not pure scurvy but was a mixed deficiency disorder which included not only other vitamin deficiencies but also secondary infection.

Scurvy is of further historic interest in

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that this disease was commonly encountered in seamen who were deprived of fresh food for many months at a time during the days of sail, and it was in 1795 that a lime juice ration was made routine for the men of the British Navy. This gave to our British cousins the nickname "Limey," which is still applied to this day!

Deficiency diseases are generally not as common in this area of southern United States as they were some years ago. While a medical student in Boston I saw some cases of infantile type scurvy with their classical bone changes, but I do not believe I have ever seen a case of adult scurvy before.

It is well known that ascorbic acid is necessary in the treatment of burns and for wound healing. It is considered necessary for connective tissue formation both in ground substance and in collagen.

To summarize them, the clinical manifestations of scurvy include malaise, weakness and lassitude as subjective symptoms. The signs consist of perifollicular hemorrhage, usually in hyperkeratotic hair follicles appearing on the posterior thighs, anterior forearms and abdomen. In addition, there are usually ecchymoses and swollen, inflamed, spongy gums which may be secondarily infected. Finally, there is anemia associated with postural hypotension and syncope.

Our patient showed the fatigue, malaise, weakness and lassitude which characterize cases of scurvy. The hemorrhages and ecchymoses were so severe that I thought that he had suffered extensive trauma. The only tissue hemorrhages which I had seen before which were this severe were in a patient who was beaten to death with a club.

The patient did not show the gingival changes which are commonly seen in scorbutic patients but it has been noted that people who are edentulous do not show the gingival signs of scurvy.

The patient was anemic and he also had postural hypotension which, with syncope, are the cardiovascular manifestations of scurvy. It is possible that the low hematocrit may be at least partially explained by tissue hemorrhages and also that the postural hypotension is related to hypovolemia.

Scorbutic petechiae and follicular keratoses are remarkable in that the petechiae appear on the hairy surfaces of the arm when the tourniquet test is applied. As most of you will recall, the positive tourniquet test is usually manifested by petechiae on the flexure surfaces of the arm.

Crandon's[1] work indicates that measurable ascorbic acid levels cannot be found in the patient who has been deprived of vitamin C for 41 days. He further noted that fatigability and anorexia preceded the appearance of physical signs. The normal fasting range of plasma concentration of ascorbic acid is considered to be 0.7 to 1 mg%. Our patient had an ascorbic acid level of 0.22 mg%.

There is an association of scurvy with adrenal insufficiency and indeed, scorbutic patients, when terminal, have the appearance of an Addisonian crisis. The metabolism of ascorbic acid is somehow related to folic acid and the anemia associated with scurvy is sometimes of a macrocytic type.

I shall now terminate the clinical discussion in favor of Dr. Kitabchi's presentation of the biochemical aspects of ascorbic acid deficiency.

DR. ABBAS KITABCHI: The all-important question in this patient is whether or not he has true scurvy. Although the dietary history revealed little or no intake of fresh fruit or vegetables for many months, he does not exhibit classical signs of scurvy. To accurately evaluate his condition, we had to transfer him to the Clinical Research Center where he could be maintained on an adequate diet which was specifically low in ascorbic acid. With the expert assistance of the nursing and dietetic staff of the Center we were able to maintain him on a daily caloric intake of 1800 to 2200 calories, containing only 2 to 4 mg of ascorbic acid.

We proceeded then to evaluate this patient's ascorbic acid metabolism. Table 1

Table 1

Ascorbic Acid

	Patient	*Control*
Plasma (mg.%)	0.12 - 0.17	0.9 - 1.1
Buffy coat (mg.%)	undetected	39
Urine (mg./24 hrs.)	2.0	15.0

shows his plasma, buffy coat, and urine ascorbic acid as compared to the control. In

all three parameters, the patient had low values which were definitely compatible with low body storage of ascorbic acid. Using the ascorbic acid loading test, we gave him 1 mg of ascorbic acid per pound of body weight intravenously and measured his urinary ascorbic acid in the subsequent 5 hours. His total excretion of ascorbic acid during this period was only 1.3 mg. Normally, a subject with adequate body stores of ascorbic acid should exrete at least 50 to 60% of the administered ascorbic acid in 4 hours. Our results on this patient, therefore, imply low tissue storage of ascorbic acid.

Although deficiency of vitamin C is associated with scurvy, the classical descriptions of this disease probably were those of severe malnutrition as a result of multiple specific nutritional deficiencies.

The work of Crandon and associates[1] was the first report of experimental scurvy in man. The time and events of development of scurvy in these subjects after dietary deprivation of ascorbic acid were as follows:

1. Plasma ascorbic acid reached zero	41
2. Buffy coat ascorbic acid fell to zero	130
3. Hyperkeratotic papules over the buttock and calves	132
4. Perifollicular hemorrhages	161
5. Failure of wound healing	181

The only other manifestation was interruption of the lamina dura observed on x-rays of the teeth.

It is interesting that no anemia and no decreased resistance to infection was noted in these subjects. Furthermore, there was no clear correlation between capillary fragility and vitamin C. Our patient upon admission had anemia, but when he was maintained on adequate diet (but without ascorbic acid) he appeared to correct his anemia as noted by an increased reticulocytosis and hematocrit. His ecchymoses were secondary to trauma and were rapidly resolving. He still has a certain number of skin lesions, however, which Dr. Hashimoto will discuss in detail. His gingival lesions are minimal and could be due to lack of vitamin C.

Scurvy is a disease which is peculiar to the animals that do not synthesize ascorbic acid. The only animals, therefore, which require this vitamin are man, subhuman primates, guinea pigs, Indian fruit bats, and the red-vented bulbul![2]

The reason for the inability of these species to synthesize ascorbic acid is a genetic defect in the enzyme that converts gulonolactone to ascorbic acid. This enzyme, which is known as gulonolactone oxidase, is located in the liver microsomes and requires the substrate (gulonolactone) and oxygen.[3]

The rich sources of vitamin C are fresh vegetables, meat and citrus fruits. It is of note that turnip greens and English walnuts are the richest sources of this vitamin. Boiling and cooking of food destroys most of vitamin C; hence, use of fresh food or exogenous vitamin C is necessary for prevention of scurvy. The daily requirement of vitamin C for prevention of scurvy is about 10 mg, although a larger amount (50 to 75 mg per day) is suggested to keep body tissues at saturated levels.[4]

Biochemical and physiologic roles of ascorbic acid are many,[5] but among those most well demonstrated is the role of this vitamin in the formation of "repair" colla-

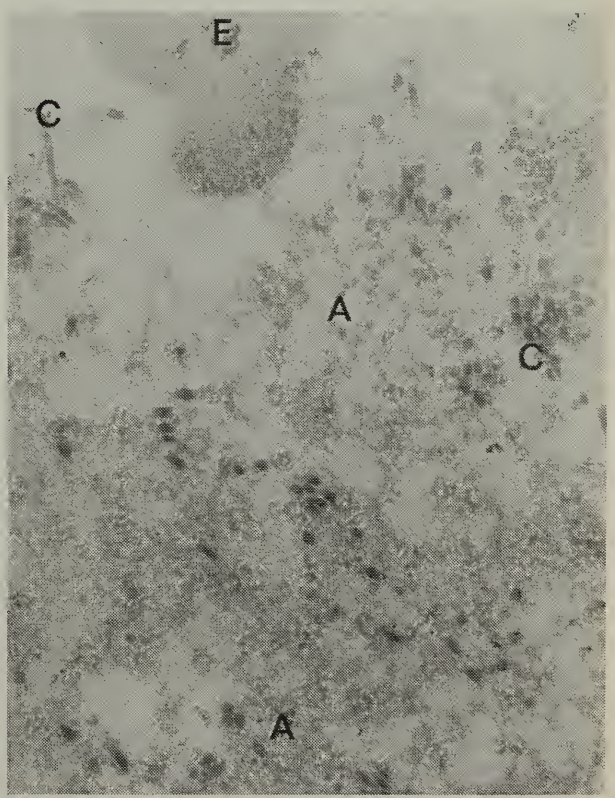


FIG. 1. Amorphous to finely fibrillar material (A) fill the spaces between mature collagen fibers (C) E: Extravasated erythrocyte.

gen. Ascorbic acid apparently is not necessary for older or "growth" collagen, but is necessary for normal tyrosine metabolism in that it protects parahydroxyphenyl pyruvate oxidase from inhibition by its substrate. Ascorbic acid is involved also in hydroxylation of proline to hydroxyproline in folic acid metabolism. It is interesting that not very many of these functions have been shown to have a correlation with the pathogenesis of scurvy.

Ascorbic acid has been implied to play important roles in steroidogenesis and in the electron transport system of the oxidative phosphorylation but the *in vivo* demonstration of these functions in man must await further work.

DR. KEN HASHIMOTO: No ultrastructural work has been done on human scurvy, to my knowledge. Ross and Benditt,[6] however, studied wound healing processes in

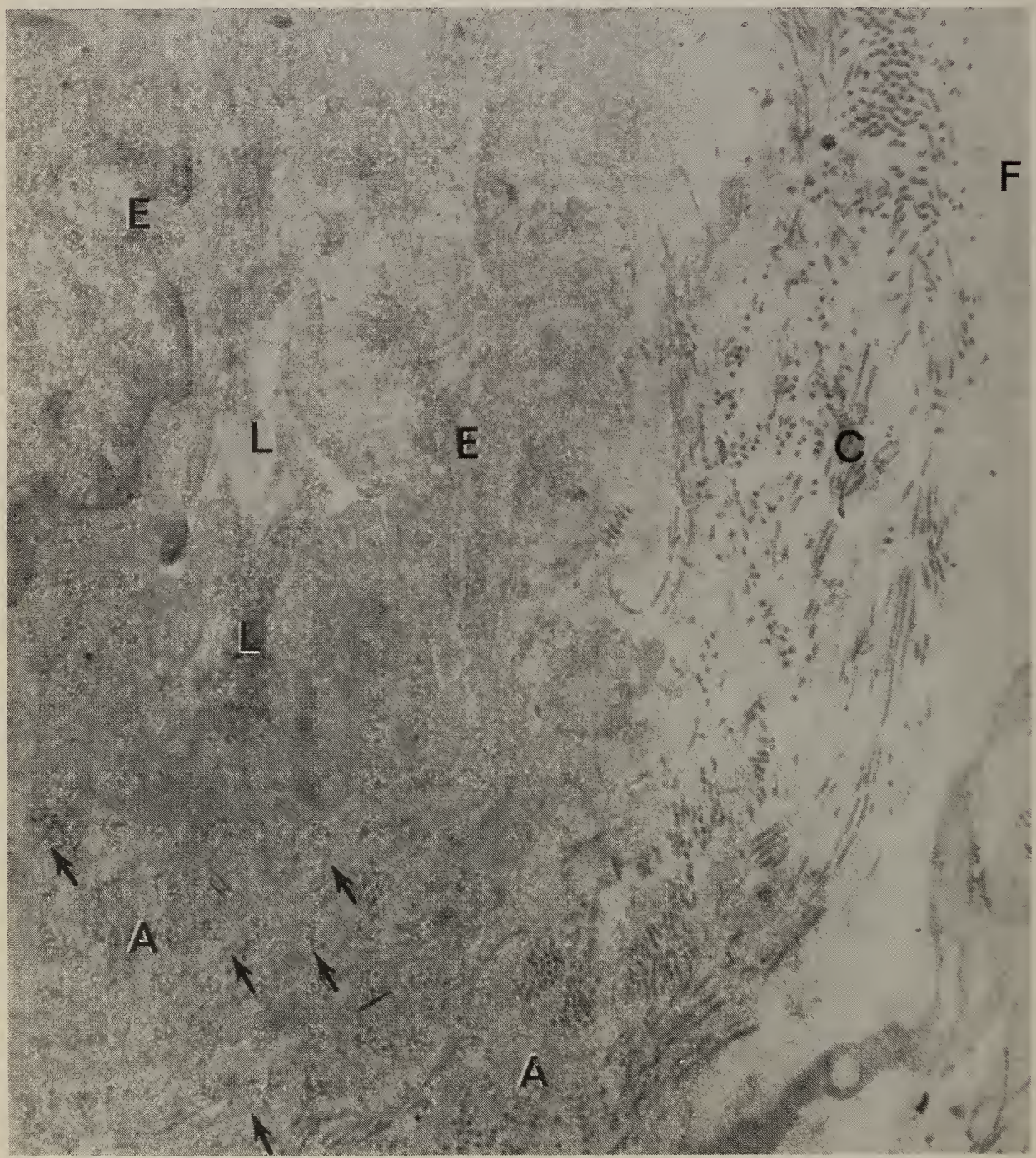


FIG. 2. A capillary lumen (L) is surrounded by swollen endothelial cells (E). Multiple layers of basal lamina (arrows) surround the periphery of these endothelial cells. Perivascular collagen fibers (C) are widely separated by amorphous (A) to finely fibrillar (F) substances.

scorbutic guinea pigs and described the following ultrastructural abnormalities which are attributable to vitamin C deficiency:

(1) a large amount of dense material, which is fibrillar but poorly organized, replaced collagen fibrils in the intercellular spaces;

(2) the majority of fibroblasts contained large aggregates of lipid;

(3) the rough endoplasmic reticulum (protein-synthesizing organelle), of abnormal fibroblasts was less developed, and was round-shaped and discontinuous in contrast to the extensively developed, elongated and interconnected cisternae of the fibroblasts found in the healing wounds of normal guinea pigs; and

(4) an increased macophagic activity of the histiocytes.

The specimens taken from four perifollicular, hemorrhagic lesions of the right leg of this patient showed most of the abnormalities described by Ross and Benditt.[6] Amorphous to finely fibrillar substances were present in abundance in the intercellular spaces (Fig. 1) and in perivascular spaces (Fig. 2). These substances also filled spaces between strands as well as between individual fibers of mature collagen which showed a normal periodicity of 550 to 640Å[7] (Fig. 3). These probably represent building materials of collagen which failed to undergo normal polymerization and are mixed with mucopolysaacharide ground substance.[6] It appeared that these substances replacing collagen in the perivascular spaces provided less support to the vascular wall and thus hemorrhage occurred. Endothelial cells of many capillaries were swollen (Fig. 2) but intercellular cement and tight junctions appeared normal. Some small vessels were seen surrounded by multiple layers of basal lamina (basement membrane) (Fig. 2). This arrangement could represent a defense mechanism to strengthen the vascular wall, or a repair process as has been observed in sun-damaged skin in which the dermal collagen is degenerated.[8] However, it must be mentioned that a minor degree of duplication of the basal lamina is seen even in normal venules of the skin.[9]

Many fibroblasts showed round, discontinuous rough endoplasmic reticulum as described in scorbutic guinea pigs but did not contain aggregation of lipid (Fig. 4). Instead, they often contained a large number of aggregates of ferritin or hemosiderin. As has been observed in another hemorrhagic condition, i.e., Kaposi's hemorrhagic sarcoma, many fibroblasts seemed to have acquired phagocytic ability.[10] Histiocytes demonstrated intensive phagocytic activity and contained variously-sized aggregates of ferritin within their lysosomes.

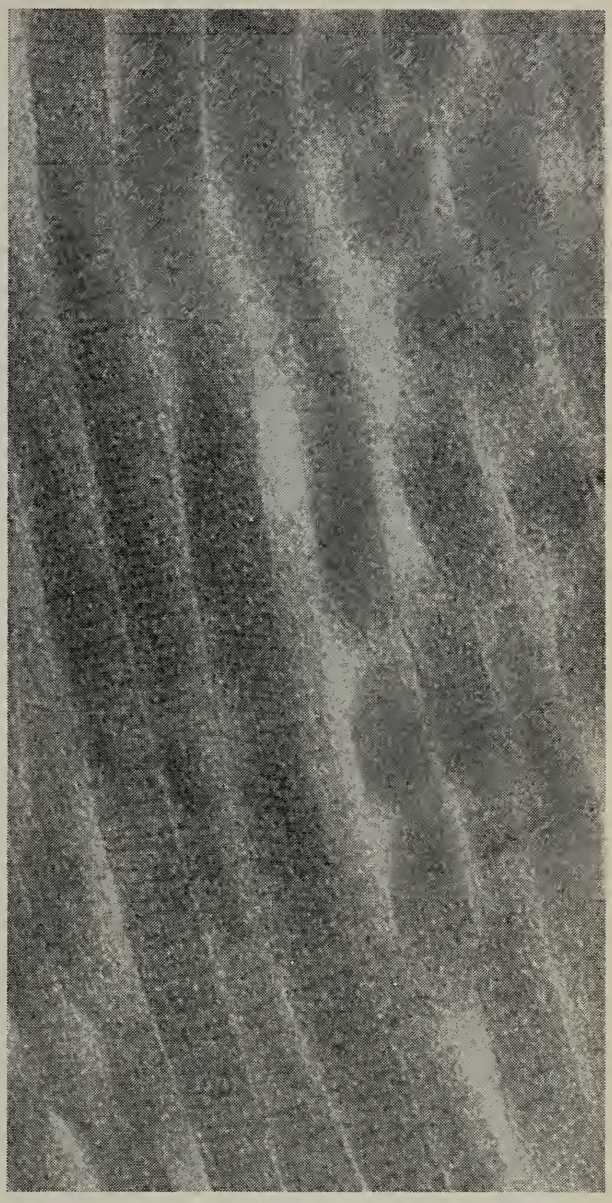


Fig. 3. Mature collagen fibers show periodic bands of 550 Å to 640 Å.

The above findings are compatible with the biochemical data as discussed by Dr. Kitabchi in that neogenesis of collagen but not the maintenance of preformed, mature col-

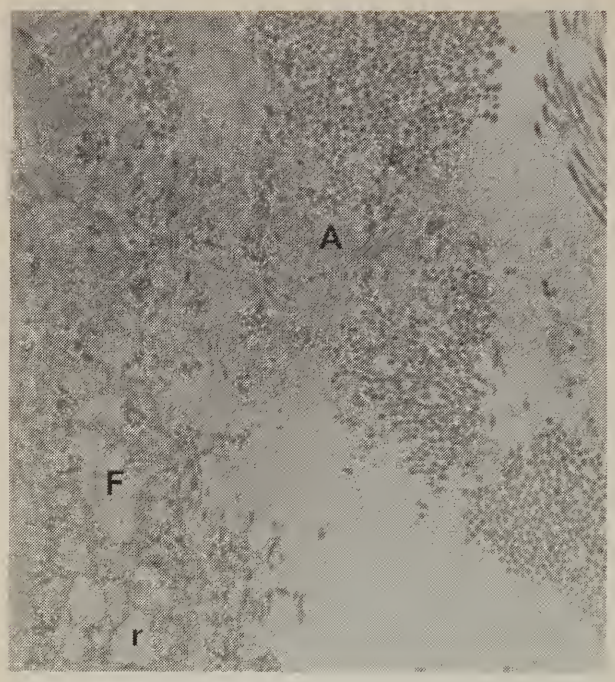


FIG. 4. A fibroblast contains variously-sized round, discontinuous rough endoplastic reticulum. Note that the extracellular spaces are filled with dense amorphous materials in which mature collagen fibers are sparsely embedded.

lagen requires ascorbic acid. It is, however, possible that in a very chronic and severe case, with morbidity extending longer than the turn-over period of dermal collagen, the collagenous structure of the skin could be totally affected.[11] In our material strands of mature collagen with normal periodicity were still observed and therefore chronicity of this duration does not seem to be the case.

DR. STOLLERMAN: I regret that time does not permit further discussion of this most interesting problem.

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TMA MEDICAL DIGEST

News of Interest to Doctors in Tennessee

TMA INSURANCE PROGRAM SAVES DOCTORS $125,000 . . . Many Association members tend to consider their membership as an intangible asset . . . A bit of arithmetic will illustrate that nearly 2,000 TMA members can truly measure one of the values of their Association in "dollars and cents" . . . TMA's program of professional liability insurance, written for Association members only, will save participating members about $125,000 in insurance premiums. This is true because the TMA carrier will not participate in the increased rates of 10%. (Higher percentage applies to higher coverage) . . . The Shelby Mutual Insurance Company of Ohio, TMA's approved malpractice carrier, has declined to increase the rates as recommended by the National Bureau of Casualty Underwriters, and participating TMA members have thereby avoided another significant escalation of premiums . . . The Association's group Insurance Committee works closely with the carrier in studying malpractice trends. Future premium rates depend on how successful the Committee is in creating a medical and legal environment unfavorable to malpractice claims. It depends on the cooperatin of all TMA members to be sensitive to their medical and legal responsibilities toward the patients they serve.

* * * * *

ANOTHER SOCIAL SECURITY TAX INCREASE—TELL YOUR EMPLOYEES WHY . . . On the first payday in 1969 for every employer, the law requires an increased deduction for social security tax. Employees and employers will each have to pay at the rate of 4.8% on the first $7,800 of annual pay instead of at the present rate of 4.4%. The maximum deduction will be $374.40, compared with $343.20 for 1968. The change became effective on the first 1969 payday whether or not the pay is for services performed in 1968.

* * * * *

STEPS FOR STATE MEDICAL ASSOCIATION SUCCESS . . . Dr. Dwight L. Wilbur, President, American Medical Association, in a recent speech before the Texas Public Affairs and PR Conference stated: . . . These are the rungs I see on the ladder of success for a state medical association and its members who want a leadership position:

- Cooperation with all elements of health care and the public to become familiar with existing health problems.
- Participation in the legislative process at every level.
- Maintenance of high standards of quality in medical practice through continuing education, and establishment of public understanding of the reasons for the rising cost of care.
- Peer review and discipline within the profession.
- Advancement of knowledge of the causes of major illnesses.
- Generation of support for the expansion of medical school enrollment and for the education of more people in every health care profession and service.

- Expansion of coverage by voluntary health insurance and prepayment plans, and assumption of responsibility as the source of all information on health care economics.
- And maintenance of the profession as a free and unshackled profession . . . To undertake a program this large, the association is going to have to count on the dedicated efforts of many of its members . . . The association as a whole will need an over-all attitude of leadership, not by a few members, or by the officers, but by the membership as each conducts his own practice and as he participates in association activities.

* * * * *

UTILIZATION REVIEW GUIDELINES . . . As referred to the Board of Trustees of TMA by the House of Delegates, the Utilization Committee restudied the guidelines temporarily adopted by the House of Delegates in April, 1968. The Board approved the amendments as presented by the Committee and authorized it to furnish the revised guidelines to the fiscal intermediary . . . It was also recommended that the guidelines should not be adopted as policy of the Tennessee Medical Association and therefore no action would be required in the House of Delegates in 1969. The Board pointed out that it could be a point of information in the annual report of the Utilization Committee to the House of Delegates in 1969.

* * * * *

CONTINUING EDUCATION COMMITTEE PROGRAM APPROVED . . . The TMA Board of Trustees approved the recommendation of the Committee on Continuing Medical Education, directing that TMA take a positive and aggressive stand and be the leader in continuing education with its program, including the coordination of the activities of all those organizations and institutions involved. In addition, the present Steering Committee on Postgraduate Psychiatric Education was made a subcommittee of the Committee on Continuing Education.

* * * * *

DATES FOR 1969 ANNUAL MEETING . . . April 10-12, 1969 are the dates for the 134th annual meeting of the Tennessee Medical Association, to be held in Gatlinburg with headquarters at the Gatlinburg Auditorium . . . Scientific and business sessions will also be conducted in the hotels and motels in Gatlinburg . . . Sessions of the House of Delegates will be conducted on Thursday afternoon, April 10th, and Saturday afternoon, April 12th in the Gatlinburg Auditorium. Reference Committees will meet all day on Friday, April 11 . . . Any member of the Tennessee Medical Association who desires may appear and be heard before any Reference Committee of this Association.

* * * * *

WHAT TO LOOK FOR IN THE 91ST CONGRESS . . . Reliable informants point out that the best bet is that the next two years will see only congressional housekeeping . . . With amendments to correct some of the many health acts passed . . . Some minor health legislation . . . But mostly a stand-off between a Republican Administration and a Democratic congress. Nixon's campaign plank of returning public programs to the private sector of the economy extends to medicine but an unfriendly congress may make this hard to deliver . . . Also, many Republican and Democrat office holders are calling for expansion of Medicare and a drive is already underway advocating a national health system.

* * * * *

WARNING . . . TMA has approved the use of the emergency medical identification symbol, tags and cards, but they have not endorsed any agency or distributor of these items.

Public Service

THE TENNESSEE TEN

Hadley Williams, Public Service Director

PHYSICIAN VOLUNTEERS NEEDED FOR CAPITOL FIRST AID STATION . . . Physicians who would be willing to staff the TMA sponsored Capitol First Aid Station on a Tuesday, Wednesday, or Thursday are urged to contact Mr. Williams at TMA Headquarters. The facility, co-sponsored with the Tennessee Hospital Association, will require approximately 75 physicians during the current session. Your help is needed!

* * * * *

AMA HOUSE ADOPTS MODEL ANATOMICAL GIFT ACT . . . The AMA House of Delegates at the Miami Beach Clinical Meeting December 1-4 adopted The Uniform Anatomical Gift Act, which has already gained approval of the American Bar Association. The Act serves as a prototype or model law seeking a greater degree of uniformity in state laws on donation of tissue after death. The Act was recommended by the AMA Board of Trustees in a report which stressed that existing state laws vary from state to state and "are so lacking in uniformity that it is practically impossible to make a lawful donation of human tissue for delivery across a state line." State medical associations were urged to sponsor the Act in their respective state legislatures.

* * * * *

HEART TRANSPLANT GUIDELINES ADOPTED . . . The AMA House also adopted five guidelines concerning heart transplantation. The five points are: 1. The preservation of good medical practice demands that the evolution of therapy be orderly. "The staff of a hospital or medical center planning to initiate such a program should have: (1) adequate background in animal research so that experience is gained as to the problems, potentials and limitations of cardiac transplantation; (2) experience in immunosuppressive therapy and an adequate source of antilymphocyte globulin of known quality; (3) a protocol of clinical research adequate to follow and evaluate the course of the patient." 2. Due regard for the welfare and safety of each individual patient is paramount. 3. Heart transplantation has brought certain medical, ethical and legal questions into critical focus. "Paramount among them is the determination of death. The right of the prospective donor to the best possible medical care—a right which his potential role as organ donor must not be allowed to abrogate—must remain sacred. The growing ability of medical science to maintain some form of biological function for prolonged periods adds to the difficulty of defining the point of irreversible dissolution." "The cause of death must be evident and of an irreversible type. The fact of death must be established by adequate, current and acceptable scientific evidence in the opinion of the physicians making the determination. The determination of death in organ donors must be made by no less than two physicians not associated with the surgical team performing the transplant." 4. The potential for heart transplantation, whatever that may prove to be by subsequent clinical experience, will be "severely limited by the shortage of potential organ donors . . . Basic research into the causes of heart disease and of hyper-

tensive vascular disease is . . . of vital importance, since the only ultimate solution to the problem of heart disease lies in its prevention." 5. "Human heart transplantation has been accompanied from the outset by a degree of public awareness and attention almost without parallel in medicine . . . It is imperative, therefore, that the public be made fully aware of the potentialities and limitations of heart transplantation as those are currently understood and as that understanding is modified by subsequent experience . . . Only by preserving public confidence in the judgment of the physician, can the orderly progress of medicine be maintained."

* * * * *

CONGRESSMEN AND SENATORS RATED . . . The National Chamber of Commerce recently compiled a summary of evaluations made of U. S. Congressmen and Senators by the Americans for Constitutional Action (ACA), the Americans for Democratic Action (ADA) and the AFL-CIO Committee on Political Education (COPE). Each of these organizations chose a number of record votes of Members of Congress on what it considers key issues. The votes are then judged to be "right" or "wrong" when weighed against the viewpoint of the organization. As might be expected in view of the different political philosophies of the three groups, their ratings differ. The Americans for Constitutional Action is known as a "conservative" organization. Formed in 1958, it evaluates votes which in its opinion, "have a significant bearing on the preservation of the spirit and principals of the Constitution, as these were defined by the Founding Fathers of our Republic." The Americans for Democratic Action was organized in 1947 "to formulate liberal domestic and foreign policies" and to enlist "public understanding and support of these policies." COPE was formed in 1955 to help elect "progressive and pro-labor candidates to public office." The ACA states the Congressman's voting tendencies in terms of a percentage figure—100 percent being perfect in the view of the ACA. The ADA evaluates votes in terms of what it considers to be "liberal" policies and refers to its ratings as the "liberal quotient", which it defines as a "measure of the liberalism of a Member of Congress determined by the percentage of his votes in harmony with liberal policies." COPE itself does not assign a percentage, and the Chamber ratings are unofficial, being calculated by determining the percentage of "right" votes out of the total recorded in official AFL-CIO voting records. How does your Congressman and your two Senators rate?

	Vote Record		
Member of Congress	ACA	ADA	COPE
Sen. Howard Baker (R)	65	23	36
Sen. Albert Gore (D)	17	54	80
Rep. James Quillen (R)	92	7	11
Rep. John Duncan (R)	90	13	12
Rep. Bill Brock (R)	92	13	3
Rep. Joe Evins (D)	22	47	66
Rep. Dick Fulton (D)	6	67	95
Rep. William Anderson (D)	9	73	92
Rep. Ray Blanton (D)	46	20	38
Rep. Fats Everette (D)	31	20	46
Rep. Dan Kuykendall (R)	85	7	15

Representative Dick Fulton recived COPE's highest rating, a near-perfect 95 while Representative William Anderson's 73 was high for the liberal ADA group. Representatives Bill Brock and James Quillen both received 92 from the conservative ACA organization.

T M A

SPECIAL ITEM

Statement of

THE TENNESSEE MEDICAL ASSOCIATION

Relative to Title XIX of P.L. 89-97—Dec. 20, 1968

The Tennessee Medical Association was asked to join its sister organizations of this region at a conference held by the Department of Health, Education and Welfare in Atlanta for discussion concerning the implementation of Title XIX. TMA, having had close liaison with Tennessee's official family and the General Assembly, had crystallized its stand in the following statement which was presented at the meeting referred to above. The Association's members should be aware of these developments as of this date.—Editor

The purpose of Title XIX as defined in the federal statute is consistent with organized medicine's position that federally financed medical care and services should be provided to persons on the basis of financial need.

The physicians of Tennessee are strong in their conviction that Title XIX is a medical care program, not a welfare program, and that medical care should be administered and provided by medical personnel. Without physicians, there will be no Title XIX program in Tennessee or in any other state or jurisdiction. The five basic medical services the federal law requires our state to provide, in addition to physicians' services, will be made available to recipients as a result of a physician's actions. To provide hospital services, a physician must determine hospitalization is necessary; to receive laboratory and x-ray services, a physician must authorize the patient to receive them; to receive drugs, a physician must order the medication via a prescription; and so on down the list of services.

The physicians of Tennessee have felt that insomuch as they are responsible for each patient's total care and for judging and ordering what service is needed, plus the amount and duration of each service, the recommendations of physicians regarding the establishment of a program is not only desirable but necessary. We have attempted to fulfill this obligation through liaison with the public and mental health committees of the Tennessee General Assembly, Tennessee Department of Public Health and other interested personnel of the State Government and administration. Many of our recommendations have been incorporated in the legislation adopted by the Tennessee General Assembly to establish a program in July of 1969. We continue to maintain this liaison while appropriate rules and regulations are being drawn as well as basic policies of implementation are being formulated.

Several policy statements have been adopted by the Tennessee Medical Association regarding the establishment of a title XIX program in Tennessee. Specifically, the Tennessee Medical Association favors full implementation of Title XIX in Tennessee insofar as it is fiscally feasible. The State of Tennessee has not moved hastily nor irresponsibly towards establishing a program in Tennessee. The Tennessee Medical Association concurs with the deliberate methods used to evaluate the full impact of a Title XIX program in Tennessee and to adequately determine the additional financial needs such a program will require prior to implementation. We recognize and share the concern of legislators and state officials regarding the revenue requirements Title XIX necessitates.

Our Association strongly agrees with placing the responsibility of administering a Title XIX program in Tennessee with the Department of Public Health. We believe the program should be under the direction of a full-time physician with as many other full-time physicians employed as needed to adequately direct and supervise the program's implementation and operation.

The policy has been adopted by our Association which states that when any agency of the government assumes financial responsibility for an individual's health care,

reimbursement for the physician's professional services should be on the basis of usual and customary charges, this provision being part of Title XVIII of this same law and currently being followed. It is clear throughout Title XVIII that the intent of Congress was that compensation should be directly related to the extent and complexity of the services rendered. Title XVIII provides that payment should be the usual charge for similar services rendered to those in a particular community who pay their own bills, either directly or through an acceptable third-party mechanism.

A visit with one's own doctor is and should be a personal matter. We believe every effort should be made to preserve this traditional physician-patient relationship. The patient is most likely to receive high-quality care under the free-choice and fee-for-service system. Every recipient of medical care under Title XIX should be allowed the free choice of physician and facilities available under the program. We also favor a provision to allow a physician the option of dealing directly with the patient regarding payment for his services or with the fiscal intermediary, should one be appointed, as provided in Title XVIII of P.L. 89-97.

The Tennessee Medical Association has strongly recommended that a fiscal intermediary be selected by the state for a Title XIX program, and that the carrier should be the same as utilized by the federal government in Tennessee to act on their behalf in the determination and payment of fees to physicians under Part "B" of Title XVIII. The designation of a different intermediary would cause a complexity of problems and would confuse both physician and patient in establishing and maintaining an efficient and smooth operating program.

The Tennessee Medical Association has recommended that membership on the Medical Care Advisory Committee, as required by the federal statute, be composed only of representatives of the providers of services made available to recipients of the program. Recommendations for appointment to the committee should come from those organizations or associations that represent the majority of the providers.

We are also of the opinion that once a program has been established and is in operation, the Department of Public Health, along with the Medical Care Advisory Committee, should consider periodically if an extension of the scope, duration and amount of medical assistance is feasible and within the limit of appropriated funds. When it is feasible for additional services to be provided, careful consideration should be given not only to the type of service but to a recipient's basic health care needs in order that each may receive the maximum benefits necessary and required for maintaining good health.

The Tennessee Medical Association is concerned over the ever-increasing burden of unnecessary documentation of medical services required of the physician and hospital. The certifications, signatures and diagnosis continually being required takes an untold amount of that one ingredient all physicians are constantly striving to conserve—time. We are strongly in favor of all unnecessary documentation of medical services by physicians being eliminated by Congress.

Title XIX is in keeping with medicine's long standing position that those who need help should receive it but that tax-supported programs should be limited to those who are in need. The Tennessee Medical Association has also adopted a set of guidelines for determination of medical indigency which is attached as part of this statement.

Principles for the Determination of Medical Indigency

(As Adopted by the Tennessee Medical Association, April, 1967)

1. Medical indigency is a combination of two factors: the need for medical care and the inability to pay for it.
2. The need for medical care is a medical decision, which should be made by a physician.
3. In the absence of clear evidence to the contrary, individuals or families receiving financial assistance for day-to-day living costs from state or local tax-supported programs should be assumed unable to pay for medical care unless that

financial assistance includes an allowance for such care.

4. Determination of inability to pay should, as far as possible, be made at the local level, with local administration and control.
5. The process of determining financial eligibility should be prompt and should not delay receipt of necessary care.
6. The primary qualification for assistance is need. Standards of eligibility should be applied equally and without discrimination to all applicants.
7. Determination of inability to pay should be based on comparison of the individual's or family's financial resources and a reasonable estimate of the amount necessary for adequate maintenance of the necessities of life.
8. No fixed financial level should be established for determining medical indigency. Self-sufficient individuals and families should be eligible for help when major illnesses reduce their resources to a point below what is necessary for a reasonable living standard.
9. When inability to pay results not simply from general financial need but from the cost of a major medical procedure, the anticipated cost of care should be determined in consultation with appropriate medical authorities.
10. Due regard should be paid to enabling the individual family to regain or retain self-supporting status, as far as possible.
11. Those not already financially indigent should not be required to reduce their incomes to this level in order to obtain help.
12. Administrative procedures should be as simple as is consistent with good administration. Requirements which tend to discourage those needing help from applying should be eliminated.
13. The rights, the privacy, and the dignity of the applicant for help should be protected.
14. Provision should be made for appeal of adverse decisions.
15. So far as possible, agreement as to what constitutes medical indigency should be reached by all public and private agencies involved in the provision and financing of medical care.

NOTE: As used in these principles, "medical care" means institutional and ancillary services, as well as physicians' care.

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President's Page

TMA's HEADQUARTERS IN NASHVILLE



Dr. Newell

How many of you have ever visited the TMA headquarters in Nashville? Possibly one out of 25 of our membership. Since 1956, the headquarters of our Association has been located at 112 Louise Avenue in Nashville. The growth of the Association and the effective pursuit of its expanding activities depend more and more upon an efficient central office operation. At the present time, there is a severe crowding of the present available floor space and there is no question that additional space is needed.

This Association needs to get on with its expansion of the headquarters building as soon as adequate financing can be determined by the House of Delegates. Sufficient property adjacent to the present building is already owned by the Association and it is adequate for the needed addition to the present headquarters. It will provide the space needed and allow us to construct such facilities that will provide for TMA's future needs.

Some of the essential activities which are conducted in our central office are: Communications to the membership, services to the membership such as publishing the Journal, the Roster, Newsletters and proceedings of the Board of Trustees, Council and House of Delegates sessions, minutes and reports of our more than 40 committees, maintaining permanent membership records, mailing list and equipment, collection of dues for TMA and AMA, and maintaining effective liaison with many state and federal agencies—constantly increasing in importance and number. Our Headquarters in Nashville also is considered as the "front door" of the Tennessee Medical Association as viewed by the Communications media and the public. It is part of our image. There are many other services, plus some which should be added as soon as space permits. The Planning and Development Committee of the Board of Trustees has been actively studying our overall space problem and needs for several years. It has never been the intent of the Tennessee Medical Association to construct a headquarters building that would appear to be a "memorial." Our present building is a simple, efficient and workable building. Any addition, from the Board of Trustees viewpoint, should continue to be as simple and practical as possible for the purpose of conducting the business, services and scientific activities of this Association.

Your continued interest in and serious consideration of these matters are needed in order for your Association to achieve its proper goals in the coming months and years.

Sincerely,

Edward T. Newell Jr.

President

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JANUARY, 1969

EDITORIAL

DR. JAMES A KIRTLEY—AN APPRECIATION

Each month on the editorial page acknowledgement might be made of some Tennessee physician who had contributed much and in varying ways to his community. To do so would be impractical. However, upon occasion it is fitting that the contributions of a Tennessee physician or surgeon, whether scientific or for the good of the profession or public, should be recognized. Jimmie Kirtley's death requires that tribute be paid for the uncounted hours he contributed to the Tennessee Medical Association and its members in probably the most onerous assignment among TMA Committees.

Dr. Kirtley, a Kentuckian, received his collegiate and medical education at Vanderbilt, and his graduate training under Dr. Barney Brooks. His outstanding professional competence was recognized by his election to membership and as officer in a number of surgical societies, as a teacher at Vanderbilt and Meharry, as Chief of Staff at Baptist and St. Thomas Hospitals, by his published papers, and by the Legion of Merit as Chief of the Surgical Service of the 300th General Hospital in World War II, especially during the Italian campaign.

Yet for all his professional activities and a busy surgical practice, James Kirtley found time to give of his thought and judgment to "organized" medicine. He served on the Board of Directors of the Nashville Academy of Medicine, and as its Chairman.

However, it is his contribution as Chairman of the Prepaid Insurance Committee and Chairman of its Executive Sub-Committee, which deserves the thanks of the officers and members of TMA. As an ex-officio member of this Committee your Editor observed Dr. Kirtley's work extending over the years 1955 to 1962. The fact-finding and deliberations of the Committee encompassed the Tennessee Plan and all of its facets—recipients, participating physicians, the commercial insurance industry, negotiating Medicare (the original, for dependents of military personnel), and the relationship of all these to TMA itself and to its staff. In the various phases of this Committee's activities during Dr. Kirtley's chairmanship, came periodic re-evaluation of the Tennessee Plan, its revisions, considerations of supplemental plans, and its relationships with the insurance carriers. He applied the California Relative Value Schedule to the fees of participating surgeons under the Plan and exercised a fine balance and judgment in applying and implementing relative values as each specialty society of Tennessee brought in its own list of fees—no mean job of diplomacy and persuasion. He needed repeatedly to meet the requests of nonsurgical colleagues in demands for prepaid features to meet their fees as balanced against insurance carriers who could not "sell" it to management and the public. He and his Executive Committee needed to act as mediator between representatives of the consumers and the medical profession, as well as between physicians and insurance carriers in contested claims. Demands needed to be met for requests of a Senior Citizens plan of prepaid insurance. Revisions of nomenclature were required upon occasion to match the California Unit Plan, the yardstick of the Tennessee Plan. With the Annual Session of the TMA in 1962,

Dr. Kirtley resigned as Chairman of a Committee which he had served well for seven years. He surely deserved the relief from Committee duties which he had requested.

It has been possible only to enumerate the topics or items which needed to fall under the purview of the Committee on Prepaid Insurance. Only officers of TMA, members of the Committee, and the TMA staff can have an inkling of the burden this Committee carried during those years when the medical profession was attempting to meet the public's consciousness of the need of adequate care by prepaid health and hospital insurance, the phase in history before the overt entry of government as a partner in the provision of medical care. It was a time of pressures by profession and public, requiring a balancing of one force against another.

Without doubt the Committee on Prepaid Insurance was the most important TMA committee in the years in which James Kirtley was its Chairman. It is also without doubt that the leadership he gave to the Executive Sub-Committee and to the Committee as a whole was exceptional. In turn-reporting and recommending for the Committee in the House of Delegates, and the actions which followed had an immeasurable imprint upon the practice of medicine in Tennessee. Therefore it would be quite proper for each reader to give a minute's quiet thought and thanks to the TMA member who gave many uncounted hours of service to the medical profession, to the hospitals, and to the people of Tennessee.

R.H.K.



Dear Dr. Kampmeier:

At a recent meeting of our county medical society it was revealed that you are working on a plan for continuing education in Tennessee, looking forward to satisfying requirements for relicensing of medical practitioners, this idea having been projected by the Johnson administration the past year or so. It was stated that the hope was for us here in this State to beat the Federal planners to the draw, as we all know how much of a source of trouble they could be.

I have taken postgraduate seminars almost yearly since 1946, the last being in Central Europe. While visiting medical schools we saw examination questions for fourth-year medical students. Of the 77 in the group, only 4 who were not professors of medicine said they could pass these examinations. This brings up the horrible thought that MD's would fail in wholesale lots were we to be examined on what teaching students today receive in medical schools. We have better clinical judgment, but in private practice the matter of making a living enters into the overall plan, and it is impossible to keep up with the exact chemical names of new drugs, their structural formulas, etc.

The view was expressed that our postgraduate required work might consist of closed-circuit television, regular hospital and clinical sessions with outside speakers, oral examinations by our own colleagues who would point out weaknesses in our sphere of information (we all have those weaknesses), with a requirement that special studies and reports be made of those deficiencies and in turn be accepted by the examining group as satisfactory for renewal of licenses.

However this form of continuing education devolves, it is recognized that many potential hazards lie in the path of those of us who are still active in practice, yet have found it altogether impossible to keep abreast of all details of scientific progress. It is hoped that the problem will be developed in a reasonable manner, and in a way which will make it possible for us to be relieved of undue anxiety in the matter. No one can pass a State board examination or its equivalent except those who are medical students, recent graduates, or who have spent recent time in teaching or residency work.

Yours sincerely,
R. C. Kash, M.D.
Lebanon, Tenn.

IN MEMORIAM

Hudson, Arthur Gage, Memphis. Died December 4, 1968, Age 88. Graduate of Memphis Hospital Medical College, 1906. Member of Memphis-Shelby County Medical Society.

Kirtley, James Addison, Nashville. Died December 2, 1968, Age 63. Graduate of Vanderbilt University School of Medicine, 1931. Member of Nashville Academy of Medicine.

Hobbs, Jesse Frank, Chattanooga. Died November 5, 1968, Age 64. Graduate of Medical College of Virginia, 1932. Member of Chattanooga-Hamilton County Medical Society.

Bourkard, Harrison O., Jr,, Knoxville. Died November 27, 1968, Age 54. Graduate of University of Tennessee College of Medicine, 1940. Member of Knoxville Academy of Medicine.

Edmonson, Henry G., Martin. Died November 30, 1968, Age 88. Graduate of University of Tennessee College of Medicine, 1916. Member of Weakley County Medical Society.

Demonbreum, William A., Nashville. Died December 11, 1968, Age 69. Graduate of Vanderbilt University School of Medicine, 1927. Member of Nashville Academy of Medicine.

PROGRAMS AND NEWS OF MEDICAL SOCIETIES



New Members

The Journal takes the opportunity to welcome these new Tennessee Medical Association members.

MEMPHIS & SHELBY COUNTY MEDICAL SOCIETY
Mellon Alma Fry, Jr., M.D., Memphis
William Heymoore Schettler, M.D., Memphis

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL SOCIETY
Phil V. Walters, M.D., Johnson City
William A. Wiley, Jr., M.D., Johnson City

Knoxville Academy of Medicine

The new addition to the Academy building and the remodeling of the old building is essentially completed and an informal open house was held on Sunday, December 8 giving members, their families and guests, an opportunity to inspect the new facility. The Society's annual Social Hour and Banquet was also held in the new dining room and auditorium on December 12th.

Washington-Carter-Unicoi County Medical Society

The November 7th meeting of the Washington-Carter-Unicoi County Medical Society was held primarily for the purpose of electing officers for the coming year. The following officers were elected for 1969: Dr. John F. Lawson, President; Dr. S. Martin Bronson, President-elect; Dr. Edward B. Steffner, Vice-president; Dr. James W. Gibson, Jr., Secretary; and Dr. Charles H. Hillman, Treasurer Drs. Gilbert A. Rannick, Edward Allen and Edward Hyder, Jr. were selected to serve as delegates to the Tennessee Medical Association and Drs. W. Rutledge Miller, Edward T. West, Jr. and S. Martin Bronson were named alternate delegates.

Roane-Anderson County Medical Society

A physician of national prominence presented the annual Dwight Clark Memorial Lecture at the meeting of the Roane-Anderson County Medical Society on October 29th. Dr. Henry T. Ricketts, professor of medicine at the University of Chicago and known throughout the country for his work and knowledge in the field of diabetes, addressed the members and guests of the Society on the subject, "Diabetes Mellitus." This was the eighth year that the local society has presented the lecture in memory of Dr. Dwight Clark who died in 1959 of infectious hepatitis.

NATIONAL NEWS

The Month In Washington

(From the Washington Office, AMA)

The incoming Administration work on a health program was started with President-elect Richard Nixon's appointment of John Dunlop, a Harvard University professor, to head a special task force. Dunlop, 54, is a prominent economist and an expert in the manpower field. He has been a frequent adviser to the federal government since 1948.

In a letter to employees of the Department of Health, Education and Welfare, Secretary Wilbur J. Cohen, who will return to teaching at the University of Michigan, listed 13 health goals for the 1970s. He previously had said that his teaching position would leave him time to work for new and expanded health programs. Most of the goals are non-controversial, and Cohen did not elaborate on details of implementation where controversy arises. The goals:

—Continued expansion of medical research and more rapid dissemination of new knowledge to prevent and cure illness.

—Elimination of economic barriers to medical care, through comprehensive health insurance and other public and private programs.

—Major reduction in infant mortality and early childhood diseases.

—Elimination of malnutrition.

—Improvement in the organization and delivery of medical care, with continued emphasis on high quality.

—Widespread transplantation of human organs and development of artificial organs.

—Expanded prevention and improved chances of recovery from heart disease, stroke, and cancer.

—Increase of health manpower and better use of professional skills.

—Elimination of large mental institutions and expansion of community mental health centers accessible to all.

—Family planning services available to everyone.

—Improvement in the quality of the environment, with major reduction in air and water pollution.

—Reduction of alcoholism, drug addiction, mental illness and mental retardation, and accidents.

—Elimination of smallpox, diphtheria, polio, whooping cough, and measles.

* * *

Developments in the drug field include starts on tests of an old drug in treatment of pneumonia and a new one for Parkinson's disease. The National Institutes of Health started a wide-spread test of a polyvalent pneumoncoccal vaccine that was discarded twenty years ago with the entrance of antibiotics. Edwin M. Lerner, M.D., coordinator of the test program, said it had been demonstrated that persons die of pneumonia because of early stage damage and that antibiotics have not been a cure-all. The old vaccine, manufactured by E. R. Squibb and Sons, was licensed and found effective in 1948, but was taken off the market in 1952 because of lack of sales.

The Public Health Service announced a program to test an experimental drug in treatment of Parkinson's disease. Robert Q. Marston, M.D., Director of the National Institutes of Health said the drug, L-DOPA, may help "up to 75 percent of patients." But he cautioned it has "serious and unpleasant side effects" which must be carefully checked.

Other developments in the drug field included:

—The Pharmaceutical Manufacturers Association disputed the finding of an HEW Task Force on Drugs that a $41.7 million saving could have been obtained by use of generic instead of brand name products in 67 of the 409 prescription drugs used most often by elderly persons. C. Joseph Stetler, PMA president, said the claim was not documented and was based "on the unproven assumption that prescriptions written by generic name cost substantially less."

—A Food and Drug Administration Advisory Committee said that existing data on whether birth control pills can cause cancer of the cervix is still inconclusive. The Advisory Committee on Obstetrics and Gynecology repeated the recommendation of the World Health Organization that all women using birth control pills undergo six-to-12 month medical examinations.

—The government has drawn up a national drug system to permit computerized processing of drug data. The code is designed to provide the needed common language in which to communicate rapidly and accurately essential information about drugs. The code was drawn up by HEW and the Drug Grade Conference, which represents drug manufacturers and distributors.

MEDICAL NEWS IN TENNESSEE

University of Tennessee College of Medicine

1968 recipients of the Mid-South Medical Center Council Distinguished Service Awards are Dr. T. P. Nash, Jr., professor emeritus of biochemistry and Dean Emeritus of the College of Basic Medical Sciences, and the late Dr. O. W. Hyman, who at the time of his death November 10 was Vice President Emeritus of the Medical Units and professor emeritus of histology and em-

bryology. The number of awards presented annually varies and is based on recommendations by the MMCC Awards and Memoirs Committee. Presentation of the awards was made at the council's annual banquet at the Holiday Inn Rivermont, December 16. Dr. Orren Williams Hyman, Jr. accepted for his father.

★

Dr. L. W. Diggs, professor of medicine at the University of Tennessee Medical Units, is among several investigators in this country who has been credited with producing what promises to be a quicker and more practical diagnostic procedure for the detection of sickle hemoglobin. Dr. Diggs presented his findings at a recent meeting of the American Society of Clinical Pathologists. He was chosen to test the reagent developed by Ortho Diagnostics of Raritan, New Jersey, because of his founding and directorship of the nationally recognized Sickle Cell Center at the Medical Units. A description of his research appears in a current issue of the *Medical World News*. The research team cooperating with Dr. Diggs in the project were Dr. Julian B. Schorr, associate clinical professor of pathology at Albert Einstein College of Medicine, Dr. William Q. Ascari and Dr. Alice Reiss of the Ortho staff.

★

Dr. Donald W. Selden, professor and chairman of the Department of Internal Medicine at the University of Texas Southwestern Medical School, was the fourth Neuton Stern visiting professor at the Medical Units on December 6. Jointly sponsored by the University of Tennessee Department of Medicine and the Memphis Heart Association, the professorship was established in honor of Dr. Neuton Stern, one of the first cardiologists in the Mid-South and first president of the Memphis Heart Association.

★

New Faculty—Dean Roland H. Alden of the College of Basic Medical Sciences has announced the following new appointments: Dr. Charles N. Carney, clinical instructor in pathology; Dr. Robert R. Threlkeld, assistant professor of pathology; Dr. DeWayne B. Roberts, associate professor of pharmacology; Dr. Karl Leroy Smiley, Jr., assistant professor of microbiology; Dr. Vikrom Sottiuri, instructor in anatomy; Dr. Ken Hashimoto, associate professor of anatomy (also on the faculty of the Department of Medicine as associate professor of medicine in dermatology); and Dr. Kapildo Narain Sinha, instructor in physiology.

★

Participating Faculty—Dr. Roland H. Myers, associate professor of surgery and ophthalmology, spoke on prevention and treatment of eye injuries at the Tenth National Conference on the Medical Aspects of Sports, sponsored by the AMA Committee on Medical Aspects of Sports and held in conjunction with the AMA Clinical Convention, December 1-4 in Miami Beach. . . . Dr. E. William Rosenberg, professor and chief of dermatology, also participated in the Miami meeting, speaking before the AMA Clinical Convention on "Management of Malignant and Premalignant Skin Lesions."

Vanderbilt University School of Medicine

Luther Christman, Ph.D., Dean of the Vanderbilt University School of Nursing, was recently named to a Panel on Responsibilities of Medical Schools in the Provision of Health Services for the National Academy of Sciences. The first meeting of the group, held November 12 in Washington, D. C., was devoted primarily to defining objectives for panel deliberations and delineating the informational needs of the panel. The panel will be headed by Dr. David Rogers, Vice-President for Medical Affairs and Dean of the Faculty of Medicine at Johns Hopkins University. The nine-man committee includes physicians from all sections of the country.

Tennessee Leads in RMP Projects

Regional medical programs, a majority involving continuing education of physicians, are now underway in 24 areas, with 261 separate projects being carried out, according to a government report. Thirty-one regions have not yet embarked on specific programs.

States and regions with the most listed

projects to date are Tennessee (Mid-South), 27; Missouri, 25; Texas, 24; South Carolina, 16; Intermountain (Utah, Wyoming, Montana, Idaho, Nevada), 16; Michigan, 15; Georgia, 14; Kansas, 14; Washington-Alaska, 4; Albany (N. Y.), 10; Memphis (Tenn.), 10; California, 9; Rochester, (N. Y.), 9; and Oregon, 7.

PERSONAL NEWS

Dr. Guy M. Francis, Chattanooga, was elected to the Executive Committee for 1969 of the Southern Medical Association at the recent annual meeting of the Association in New Orleans.

Tennessee physicians who participated in the scientific sessions of the SMA meeting included: **Drs. Sam H. Sanders, Richard O. Bicks, Francis M. Lemmon, Jr., Irwin J. Kerber, Stewart A. Fish, Arthur T. Fort, III, Ralph S. Hamilton, Philip M. Lewis, Henry T. Grizzard, Ernest Dehne, John J. Shea, Jr., Charles E. Eastridge,** and **William R. Pridgen,** of Memphis; **Drs. David H. Law, H. Earl Ginn, Donald A. Goss, Robert C. Nevins, Jr., Thomas F. Parrish, Jerrie Cherry, William G. Kennon, Jr., Glenn H. Shepard, Verne C. Lanier, Jr.,** and **Dr. John L. Sawyers** of Nashville. Dr. Sawyers served as Chairman of the Section on Surgery.

The largest number of surgeons in the history of the College were inducted as Fellows of the American College of Surgeons, October 17th in Atlantic City. Those receiving this distinction from the Mid-South area included: **Dr. Robert J. Smith,** Jackson; **Dr. Thomas M. Minor,** Paris; **Drs. William F. Buchner, Dee J. Canale, Hugh A. Clarke, Erwin M. Cox, William L. Duncan, Irvin D. Fleming, O. Brewster Harrington, Sam P. Patterson, William T. Satterfield, Jr.,** and **Leonard D. Wright, Jr.,** of Memphis.

Two Nashville physicians will serve as consulting editors to a new medical journal dealing with malignant disease, scheduled to begin publication early this year. They are **Dr. Jerrie Cherry,** Vanderbilt University School of Medicine, and **Dr. John Foster** of Vanderbilt University Hospital. The Journal of Surgical Oncology, in addition to covering the surgical aspects of cancer, will contain articles on experimental and clinical research and their application.

Dr. William B. Crenshaw, Nashville, has joined **Drs. John M. Tudor, Robert E. McClellan,** and **Tom E. Nesbitt** in the practice of urology.

Dr. S. Gwin Robbins will serve as president of the medical staff of Baptist Memorial Hospital, Memphis, in 1969. **Dr. Louie C. Henry** will serve as secretary, and **Dr. Wm. T. Satterfield, Sr.** has been named president-elect to succeed Dr. Robbins in 1970.

Dr. Lowry L. Sheely, anesthesiologist, has become associated with **Dr. Dana Nance,** Medical Arts Building, Oak Ridge.

Three Chattanooga doctors have been notified of their certification as diplomates of the American Board of Surgery. They are **Drs. William K. Dwyer, Paul E. Hawkins** and **Woodruff A. Banks, Jr.**

Dr. R. B. Wood, Knoxville, was honored by the East Tennessee Heart Association at the Association's 20th anniversary banquet on December 7th. Dr. Wood, founder of the Association, was given a testimonial and a plaque.

Dr. W. J. Card, Madison, was guest speaker at a meeting of the Goodlettsville Civitan Club on November 19th. Dr. Card spoke to the group on the causes, symptoms and prevention of heart disease.

Dr. John A. Yarborough, Maryville, has been elected to a three-year term on the Duke University Medical Alumni Council. Dr. Yarborough has just completed a year as president of the Alumni Association.

Dr. B. F. Byrd, Jr., Nashville, chief of surgical service at St. Thomas Hospital, has been named executive committee chairman and vice chairman of the Commission on Cancer in the American College of Surgeons.

Dr. A. L. Jenkins, Knoxville, has discontinued his private practice in pediatrics and has assumed the post of emergency department director at St. Mary's Hospital.

Dr. Sam LaVoi, Nashville, has joined **Drs. Alvin Keller** and **Abe Shmerling** in the practice of internal medicine.

Dr. K. J. Phelps, Lewisburg, was installed as President of the Middle Tennessee Medical Association at its 148th semiannual meeting on November 21st, and **Dr. George Holcomb,** Nashville, was re-elected secretary of the organization.

Officers of the medical staff of Baptist Hospital in Nashville for 1969 are **Dr. George Holcomb,** president, and **Dr. Richard Ownbey,** secretary-treasurer. **Dr. Fred Ownby** was named president-elect to succeed Dr. Holcomb in 1970.

Dr. A. J. Butler, Jr., Ripley, and **Dr. James David Rozzell,** Humboldt, have been re-elected to active membership in the American Academy of General Practice.

Dr. Robert Franks, assistant professor of pediatrics at Vanderbilt University, has been named president of the Davidson County Pediatrics Association. **Dr. Dan S. Sanders, Jr.,** practicing pediatrician, was named president-elect, and **Dr. William Doak,** secretary-treasurer.

Dr. Foy B. Mitchell, Knoxville, has been named chief of staff of Children's Hospital. Other officers are **Dr. William Byrd,** vice chief of staff, and **Dr. John Rochester,** secretary.

Drs. William S. Stoney, William H. Edwards, William Alford, and **George Burrus,** participated in a panel discussion on cardiac and vascular surgery at a recent meeting of the Nashville Area Chamber of Commerce.

Dr. Walter Willis Frey, Nashville, has joined **Drs. Henry Carroll** and **G. Allen Lawrence** for the practice of ophthalmology.

ANNOUNCEMENTS

Calendar of Meetings, 1969

State

April 10-12	Tennessee Medical Association Annual Meeting, Civic Auditorium, Gatlinburg
May 21-23	Mid-South Medical Association (Formerly Mid-South Postgraduate Medical Assembly), Memphis

National

Feb. 18-22	American College of Radiology, Regency Hyatt House, Atlanta
Feb. 23-26	Atlanta Graduate Medical Assembly, Regency Hyatt House, Atlanta
Feb. 25-March 1	American College of Surgeons, Puerto Rico Chapter, San Juan, PR.
Feb. 26-March 2	American College of Cardiology, New York Hilton, New York
March 7-13	American Association of Pathologists and Bacteriologists, San Francisco Hilton, San Francisco
March 10-13	New Orleans Graduate Medical Assembly, Roosevelt Hotel, New Orleans
March 15-19	American Academy of Allergy, Americana, Bal Harbour, Fla.
March 23-24	American Laryngological Association, Roosevelt Hotel, New Orleans
March 25-27	American Laryngological, Rhinological and Otological Society, Roosevelt Hotel, New Orleans
March 27-29	Southern Society of Anesthesiologists, Marriott Motor Hotel, Atlanta, Ga.
March 28-29	American Otological Society, Roosevelt Hotel, New Orleans
Mar. 31-April 2	American Association for Thoracic Surgery, Fairmont Hotel, San Francisco
April 13-17	American Association of Neurological Surgeons, Sheraton Cleveland Hotel, Cleveland
April 17-22	American Dermatological Association, Marriott's Camelback Inn, Scottsdale, Arizona
April 18-20	American Society of Internal Medicine, Palmer House, Chicago
April 20-25	American College of Physicians, Conrad Hilton, Chicago
April 21-23	American Academy of Pediatrics, (Boston Children's Hospital Centennial), Boston
April 28-May 1	American College of Obstetricians and Gynecologists, The Americana, Bal Harbour, Florida
April 30-May 1	American Pediatric Society, Traymore Hotel, Atlantic City, N.J.
April 30-May 2	American Surgical Association, Netherland-Hilton Hotel, Cincinnati

Congress on The Socio-Economics of Health Care, AMA

The third National Congress on the Socio-Economics of Health Care, sponsored by the Council on Medical Service and the Division of Health Service of the American Medical Association, will be held at the Palmer House in Chicago, March 28-29. The purpose of the Congress is to signify the medical profession's ongoing concern for the effective organization, delivery and financing of health care services, and to bring together authorities from medicine, health care administration, social science, education, community planning and other disciplines to report on new issues and techniques in this area. Plan to attend this Congress which will have as its theme, "Major Issues in Health Care: The Challenge to Medicine."

Postgraduate Course In Laryngology and Bronchoesophagology

The Department of Otolaryngology of the Illinois Eye and Ear Infirmary and the College of Medicine of the University of Illinois at the Medical Center, will conduct a postgraduate course in Laryngology and Bronchoesophagology from April 14 through April 25. This course is limited to fifteen physicians and will be under the direction of Paul H. Holinger, M.D. It will be held at the new Illinois Eye and Ear Infirmary, and will include visits to a number of Chicago hospitals. Instruction will be provided by means of animal demonstrations and practice in brochoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures.

Interested registrants should write directly to the Department of Otolaryngology, College of Medicine, University of Illinois at the Medical Center, P. O. Box 6998, Chicago, Illinois 60680.

1969 Essay Contest

The American College of Chest Physicians has announced the 1969 Alfred A. Richman Essay

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Contest. The annual contest offers undergraduate medical students throughout the world the opportunity to submit in open competition manuscripts on any phase of the diagnosis and treatment of cardiovascular or pulmonary disease. Research or review articles relating to the diagnosis or treatment of cardiovascular or pulmonary disease are acceptable. In accord with the rules of the contest, preceptors are at liberty to assist the student in selecting a suitable subject and guide him in the preparation of his essay.

Three cash prizes totaling $1,000 are awarded annually. The first prize will be $500; second prize, $300 and third prize, $200. Each winner will also receive a certificate of merit. A trophy inscribed with the name of the winner and the name of his school will be presented to the winner's school.

20th Annual Symposium Cardiology for Physicians

This program is sponsored by the East Tennessee Heart Association in cooperation with the Department of Continuing Education, The University of Tennessee Medical Units and the Tennessee Department of Public Health, Heart Disease Control Program. This symposium will be given at the Seminar Room, Carolyn P. Brown Memorial University Center, University of Tennessee, Knoxville, on March 27. It is approved for 8 hours of credit by the American Academy of General Practice. Guest speakers will be Noble O. Fowler, M.D., J. Alex Haller, Jr., M.D., C. E. Kossmann, M.D. and R. Bruce Logue, M.D.

Symposium on Bone and Joint Disease

The Department of Radiology, in cooperation with the Departments of Orthopedics and Pathology of the University of Kentucky Medical Center, Lexington, is presenting a symposium on "Current Concepts in Bone and Joint Disease," from April 29th-May 2nd, just before the Kentucky Derby. A distinguished Visiting Faculty and staff members of the College of Medicine will participate in this symposium. The subject matter will include the arthritides, trauma, and chondrodysplasias, among others. One day will be devoted to a panel discussion by Radiologists and Pathologists on the nuances of a variety of proven cases. New or controversial material will be emphasized.

Current Problems in Electroencephalography

Course is sponsored by the American Electroencephalographic Society and Baylor University College of Medicine, March 13-15, Houston, Texas. For further information write Dr. Peter Kellaway, Baylor University College of Medicine, Texas Medical Center, Houston, Texas 77025

AMA Service Briefs

Because of the rising incidence of drug abuse in the United States, especially among young people, the American Medical Association has published five related pamphlets, "Amphetamines," "Barbiturates," "Marihuana," "LSD," and "Glue Sniffing."

Written originally for the 1968 Community Health Week program on drug abuse, the one-page pamphlets answer many of the questions frequently asked about this growing problem. In addition to describing the effects of these dangerous substances on the body, each pamphlet stresses the hazards of experimentation, the psychological effects on the users and legal controls.

Review copies are available from the AMA's Department of Health Education. Quantity copies are available from Order Handling at 15 cents each; 50-99 copies, 14 cents each; 100-499 copies, 12 cents each; 500-999 copies, 10 cents each and 1,000 or more copies, 8 cents each.

* * *

The original "Manual on Chemical Tests for Intoxication," which discusses the value, purpose, interpretation and medicolegal aspects of chemical tests in relation to traffic law enforcement (driving while intoxicated), as well as the physiological action of alcohol, is now available at a reduced price. The basic information in the manual is still applicable and accurate.

A single copy of this book, published by the AMA's Committee on Medicolegal Problems, may be obtained in the U.S., U.S. Possessions, Canada and Mexico for 75¢.

Medical students, hospital interns and residents in these areas may receive it for only 40¢, and the cost in all other countries is 90¢. The code number is "OP-193," and requests—accompanied by payment—should be directed to the Order Department, American Medical Association, 535 N. Dearborn St., Chicago, Ill. 60610.

A new edition of this manual is scheduled for release in early September, and it will cover the same subject in greater depth, completely rewritten in a different format. This new case-bound (hard cover) version will be sold for $1.50 per copy in the U.S., U.S. Possessions, Canada and Mexico—medical students, hospital interns and residents are eligible for a 50% discount. All orders emanating from other countries will be subject to the foreign rate of $1.75 per copy.

Announcement

St. Jude Children's Research Hospital announces the establishment of a Retinoblastoma Clinic for the diagnosis and treatment of tumors and other diseases of the retina in children. For further information, write Charles B. Pratt, M.D. or David Meyer, M.D., St. Jude Children's Hospital, 332 North Lauderdale, Memphis, Tennessee 38101.

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The Physician As a Guardian of Health Care Costs*

Russell B. Roth, M.D., Erie, Pa.

The concept of the physician as a guardian of anything other than the health and immediate best interests of his patient is, I believe, a relatively modern development. Certainly in those less turbulent Oslerian days at the turn of the century, there were at best only minimal and incidental ways in which the physician was called upon to dilute his concern for his patients with consideration for the community, for hospitals, for third-party payers, for government, or for the tax-paying public.

Times have clearly changed. Janus, the god of gates and doorways, needed only two faces—for looking in and looking out. The physician today, in his role of guardian, needs to be more Hydra-headed in order to keep primary focus on his patient, while casting a wary eye on the hospital to be sure it is not overutilized, on the insurance company to be sure it is not overcharged, on the community to be sure it is well serviced, and on Medicare and the rest of the tax-financed programs to be sure they are not abused.

Nonetheless, it is the thesis of my presentation that the competent, ethical physician is indeed the *only* able guardian of the public interest in the area of consumer expenditure for medical care. As an aside, I should note that, despite my published title, I do not intend to deal with Health Care *Costs* since, in the language of the economist, "cost" is overwhelmingly a matter of the price tag on labor, materials, supplies, utilities—elements generally apart from the influence or control of physicians. The area of physician concern, quite obviously, is that in which he influences expenditures by or on behalf of his patient for the goods and services of the Medical Care Industry.

*Presented at the Second National Congress on Socio-Economics of Health Care, March 22-23, 1968, Chicago, Ill.

It is important to recognize that the guardianship to be exercised by physicians is one dealing chiefly with specific services involved in individual cases. It is concerned with professional, medical decision-making. Is it necessary to hospitalize this patient? Do we need extensve laboratory and x-ray studies? How about private duty, special nursing care? What medications will do the job? Is surgery indicated? These are the decisions that translate into dollars—into many dollars per case—and these are decisions which can be made only by physicians.

Beyond this, of course, the physician has full responsibility for his own charges, and we will come back to this in due course since it is a highly publicized issue at this point in history. The preponderant share of the medical care dollar, however, is not paid to the physician—it is paid for the goods and services which he recommends. It follows that this is the area of greater economic significance. In the 4.6 billion spent for Medicare in 1967, only 25 percent went for Part B payments to physicians.

Scarce Services

It is worth contemplating for a few moments the track record of government as a guardian of the public pocketbook. The chief and overwhelming distinction of government at the federal level has been its unbridled enthusiasm for spending. For example, since 1961 the Gross National Product has increased 49 percent. During this time, consumer spending increased 46 percent and business spending 47 percent; but government spending went up 63 percent, and if one considers only non-military spending, it went up 77 percent. The appropriations of Congress and of most state legislatures scarcely bear testimony to a philosophy of frugality. It is government which, in effect, has written the blank check for Medical Care and must look to someone else to fill in the amount. It is in large part this abundance of governmental

dollars chasing after scarce services that has created the problem.

In the field of direct patient care, government has long operated the world's largest hospital-medical-surgical program, in the Veterans Administration. Many kind things have been said about VA Hospitals, the quality of care, and the role they have come to play in teaching and research; but these compliments have not included any citations for economy and efficiency. Quite to the contrary, there have been many allegations that when the government has been in complete control, average patient stays for comparable illnesses are distinctly longer than in community general hospitals, that physician productivity is substantially less in terms of patients per MD and in physician working hours per week. The VA Hospital system can be compared to a vast closed panel group practice plan, with prepayment of a sort. I have not heard that anyone has seriously championed the fiscal feasibility of extending this type of care to the entire population.

Threat to Quality

One could cite other evidence of the fact that government has not pioneered in economy in medical care but in addition, government through its democratic processes too often stands as a threat to quality of care as well. Perhaps you saw the news stories about the Commissioner of Health in Cattaraugus County, New York, who had resigned his position rather than certify payments for chiropractic services under Medicaid. I am delighted to report that he is now heading a Health Department in Pennsylvania, and I believe he is doing a great deal more to promote quality of health care than has the New York State Legislature in foisting payment for chiropractic on the public.

Government could, of course, impose controls of various sorts. The popular one at the moment, called for by the AFL-CIO and assorted legislators and columnists, is for the establishment of fixed fee schedules. This, of course, addresses itself to the lesser part of the problem since it does not touch utilization—only physicians' fees. Presumably, several investigations of the matter of physicians' fees are to be conducted by Congress or under its auspices, and it is my personal opinion that this should not be upsetting to any physicians who are charging reasonably and fairly by existing professional standards.

It is surely not the policy of the profession or its organized societies to uphold the right of the individual physician to charge unconscionably or immoderately. One would hope that any "investigation" on this score would, in addition to documenting abuses, study carefully the opportunities for their elimination. If it is appropriate to investigate the financial dealings of Senators and Congressmen, I would concede that it is all right to check up on physicians. It should be remembered that the medical profession itself has made considerable progress in the development of review committees, grievance committees, and the like. There must also be a preservation of perspective since, in respect to Medicare at least, the elimination of a full 7 percent increase in physicians' fees, which constitute less than 25 percent of the program expenditures, would amount to a 1¾ percent saving, overall. Ill considered, punitive efforts to fix prices—a position generally abhorred by government in respect to most business—could be productive of unintended and unhappy results. I would submit that, compared to the capacities of the medical profession itself, government is ill equipped to remedy difficulties.

Deficit Operation

The situation in respect to third-party payers or consumer groups, as guardians of public expenditures for health care, is quite different from that of government. Underwriters have obviously had a sincere interest in safeguarding their own funds. None of them could survive the sort of deficit operation which is a way of life in government. But among all of the voluntary prepayment plans, the prepaid closed panel group practices and the private insurance companies, no alternative to physician review has ever been found. It is quite true that claims review is becoming automated and sophisticated to the extent that machines pick out cases which depart from a programmed range of acceptability, but the actual evaluation of the case and the

charges depends upon physician judgment.

This brings us back to my initial allegation that physicians are the only qualified guardians of the public interest in the realm of expenditures for direct patient care. It remains to consider the extent to which they are being helped or hindered in so functioning, and to discuss ways in which they may function more effectively.

Utilization of hospital facilities and services, for example, is directly related to expenditures. But this is not a simple straight line relationship. That is to say, a reduction in use does not bring about a corresponding reduction in cost. The simple illustration is the hospital room. The most expensive item in the hospital is the unoccupied room. The cost of maintaining it in large part continues, without offsetting revenue. If a zealous utilization review committee should somehow decrease hospital occupancy to the 50 percent level for any significant period of time, what would happen to the per diem cost? It would go up —not down. The most efficient, most economical form of hospital operation is that which uses its facilities and its personnel at close to tolerance levels. Without the application of a great deal of wisdom, the coalescent wisdom of the medical staff and the hospital administration, there may be great imbalances, to the disadvantage of the patient. Hospitals per se function poorly as conservators of the public dollar.

Fee-for-Service

In order to judge the propriety of charges for goods or services, it is necessary to know what the charge is, as well as the cost on which it is based. For this reason, I feel that the flight from fee-for-service is progress in the wrong direction. How is it possible to judge the equity of a hospital charge which becomes unidentifiable in an overall per diem rate? How can one pass on the reasonableness of a fee which is never established as a charge against a prepaid premium or as a credit toward the physician's salary? To abandon fee-for-service, as is currently championed by so many critics of medicine, seems to me to be forsaking the only real opportunity to identify and isolate the opportunities for economy, and to equate the price tag to the value of the item purchased. By this I imply that it is being made increasingly difficult for anyone, physicians included, to appraise the value of goods and services when the charges are submerged and lose their individual identities.

In this connection, it may be of interest to report to you a small study which I have just made in my own 500-bed community general hospital. If, as I have postulated, the physician has this important role of guardian in respect to patient expenditures, how familiar is he with the prices charged to his patients in the hospital? I listed 20 of the more common things ordered by physicians in our hospital—items such as a blood sugar, a chest x-ray, a special duty, private nurse, and the like. I asked 17 physicians to fill in what they thought each item cost the patient. Twelve were practicing physicians with many hospital patients. Five were residents in training, responsible for much of the ordering. The pattern became clear, and I didn't feel that I needed to add a lot more people in order to establish statistical validity. Physicians don't know very accurately what charges are made. The spread per item varied from 150 to 600 percent. Twenty-nine percent of the answers were correct, or close enough to count as correct. Thirty-one percent of the guesses were high; 40 percent were low. Residents were a bit wilder than the attending men. All this, I believe, simply points up an important opportunity for improvement. I believe any businessman would seek deliverance from a buyer who didn't know the price of what he bought.

Bargain-Basement Medicine

You have been hearing much about group practice and especially about the notion that prepaid closed panel group practice may conserve dollars. I regard this as undocumented, especially where quality as well as quantity requires consideration. No one, I believe, has suggested that any type of practice arrangement converts an inadequate physician into an adequate one. I don't recall who first said it, but I would agree that one thing worse than an incompetent physician would be a group of incompetent physicians. Our quest is not for bargain-basement medicine, but for compe-

tent medical care, fairly given and fairly compensated. In this quest there is still great room for innovation, experimentation and improvement. There is still much virtue in our non-system of care as against the rigidity of systems as devised by the British, the Germans, the Swedes and the others. It is naive of our government to think that the heart of the matter is how the physician is paid, or how the patient pays.

If the common denominator is the ethical, competent, well motivated physician, almost any system will work well. If not, it seems impossible to devise a system which can't be beat. This is the quandary enveloping those who discredit the medical profession. They have no happy alternative to turn to.

Frankly, I believe that those who downgrade the medical profession, who diminish its status and who undermine its authority are self-defeatists. To the degree that estrangements have developed between government and medicine, between labor and medicine, between hospitals and physicians, there are tragedies of our time. It has indeed progressed to the point where a substantial number of physicians sincerely wish to have nothing to do with government subsidized programs of care. How much better off would we be if there were constructive cooperative attacks upon our problems of financing and the delivery of services by all parties involved. I believe the medical profession needs the understanding, the support and the effective assistance of all interested parties to do the job that only it can do. And when that support and assistance are preferred, I believe the medical profession should accept it.

Two Canadian physicians, in a book called *Medicine and the State* which analyzes in depth the principal government-operated care plans—England, Germany, Russia and the like—reach what I regard as a significant, a highly important conclusion. They state it this way. "In the field of health care it does appear that once personal responsibility is removed, collective selfishness replaces the restraints of the individual conscience. Experience suggests that individual morality declines as public responsibility increases." For patients and physicians alike, we should consider the need to strengthen the sense of personal responsibility and to fortify the restraints of the individual conscience.

County Medical Society

The professional association, in this country, has done much to potentiate the efforts of individual physicians, not only in pursuit of scientific excellence, but in the exercise of civic responsibility. Perhaps all professional associations of physicians should dedicate a share of their efforts in this direction, but the one instrument best suited for the purpose is the County Medical Society. This is accessible to the full complement of ethical competent physicians, each belonging to a vigorous progressive State Association, and all integrated into the American Medical Association. Despite the abundance of brickbats aimed at the AMA, largely because of its conservatism and its resistance to government interventions and controls, it has generally been recognized as a major force for good in the advancement of scientific medicine, physician education, and the development of quality controls.

The track record of the medical profession in respect to self-discipline and the imposition of high standards is most encouraging. The admission requirements for medical school are self-imposed and they have been so high as to occasion howls of anguish. It was the profession itself, through the AMA, that acted impressively in the elimination of medical diploma mills. All of the specialty societies and certifying Boards have been voluntary developments. The evolution of tissue committees, medical audits and restrictions of privileges in hospitals have been developed by the profession itself as have the mechanisms and organizations for accreditation of hospitals and other medical facilities. Insurance claims review committees and grievance or mediation committees are inventions and developments by physicians and their medical associations. That these self-imposed controls are less than perfect is not surprising. That there is room for improvement is obvious. But this is working machinery and these are functioning programs. The bright hope lies in perfecting what we have.

Conclusions

Now I should like to try to pull these observations together in order to draw some useful conclusions.

1. Much of the expenditure of public and private funds under the general heading of medical service is outside the range of direct patient care and is beyond the immediate influence of the practicing physician. These elements relate to expenditures for research, education, capital construction, operation of institutional facilities, and the like. They need to be identified and financed as such.

2. Expenditures by or in behalf of individual patients for direct patient care are greatly influenced by physicians, and there is a great opportunity to improve physician awareness and exercise of responsibility in this respect.

3. Despite extensive efforts on the part of medical societies to encourage medical schools to include instruction in medical-economic understanding and responsibility, little has been accomplished in the schools of this country, and virtually nothing has been or can be accomplished in the foreign schools which train so many of our physicians.

4. Opportunity exists for medical economic orientation at the intern and resident level, and this may present an excellent place for cooperation between hospital training programs and local medical societies.

5. Since the physician alone is in a position to make decisions in the individual case as to reasonable alternatives in expenditure for diagnostic and therapeutic services, other interested parties should aid and abet the physician in the exercise of this decision-making responsibility.

6. Individual physicians can best be oriented and assisted by their own professional associations, which are already responsible for most of the progress in the area of utilization review, claims review and other efforts to contain expenditures for medical care.

7. Government, labor, industry, third party payers and consumer groups should lend their support and assistance to medical societies in constructive approaches to the problem.

8. Physicians and their associations should be receptive to any genuine help which may be proffered.

9. The physicians who have remained aloof from organized medicine and the AMA should be vigorously encouraged to become participants in active programs to increase physician responsibility. They should be encouraged by their schools, their employers, their hospitals and perhaps even by their patients.

10. Irrational, divisive bickerings by all interested agencies and organizations should be set aside in favor of cooperative assault on a massive problem.

(From the *Massachusetts Physician,* Nov. 1968.)

* * *

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Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville, Tennessee 37203.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

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If reprints are desired, the requested number should be indicated in the letter accompanying the manuscript. The author will be billed by the publisher.

Journal of the Tennessee Medical Association
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VOLUME 62 FEBRUARY, 1969 NO. 2

Where We Stand*

HUGH W. BRENNEMAN,† East Lansing, Mich.

A professional person, almost by definition, is a leader in today's society.

Are we interested in Leadership? Should we be? We are, and we should be, if we have the ability to lead.

"Whatever your career may be, do not let yourselves become tainted by a deprecating and barren skepticism, do not let yourselves be discouraged by the sadness of certain hours which pass over nations. . . . Say to yourselves: 'What have I done for my instruction?' and as you gradually advance, 'what have I done for my country?' until the time comes when you may have the immense happiness of thinking that you have contributed in some way to the progress and to the good of humanity. But, whether our efforts are, or are not, favored by life, let us be able to say, when we come near the great goal, 'I have done what I could.' "

Such was Louis Pasteur's counsel to the young physician. It's applicable today to us.

Thomas Carlyle believed that history was determined by the efforts of great men whom he called heroes. This word "hero" acknowledged specifically the vast scale of the leader's acts and the almost overpowering conditions against which he contended. Carlyle has been regarded by many historians as a defender of the thesis that all factors in history, save great men, are inconsequential.

To lead an organization in the manner of the hero, it is necessary to promote an idea that, when implemented, will cause substantial change. Also to assume leadership, social power, that is power over others, is to some extent necessary. Implementing the *power drive* subtly and silently is a delicate skill that separates the power elite from the more common contenders. It is a little like selling.

But the problem of leadership in professional work today is heightened because certain organizational practices have been adopted that prohibit conspicuous personality, bold and critical judgment, and resolute action. The professional association today has achieved a life of its own. It goes rambling on seemingly immune to the personal advances of any one person. It has created a social or impersonal system of leadership with the "responsible group" replacing the "responsible individual."

If, then, organizations are themselves the leaders of today's society what manner of organizations are the leaders? Without doubt all of them have one commonality. The "cause progress that would not otherwise occur by merely coping with or adjusting to conditions" . . . which I reinvite to your attention is also Mr. Carlyle's definition of a hero.

Our national professional associations are great. Look at the American Medical Association. Every week it puts out the greatest scientific journal ever known to man. It has long accepted the responsibility of making medical professional services available to all the public, and of interpreting those services to the public. Its standards of excellence and its codes of ethics are the highest.

Organized medicine has changed over the years as a scientific, social, and economic institution and has adopted and recommended progressive changes in the patterns of professional practice. Medicine has done this in conformance with the changing mores of our society as observed by the profession as well as in response to major forces outside the profession whose policies and programs

*Presented at the Fifth Tennessee Medical Association, State and County Officers Leadership Conference Nov. 17, 1968, Nashville, Tennessee.

†Executive Director, Michigan State Medical Society.

relate to health care. The speed of change is increasing. Often better service to the public has been the result of these changes. This success has inspired the faith of patients in their doctor and in the profession generally. It has also excited the admiration of the laity and professionally profited the physician. But it has not always increased the profession's popularity with the general public. In fact, projects and policies altruistically directed to the public interest, as conceived by medicine's organizations, often have been met with fear, envy and suspicion, by the people.

The medical profession as an entity is a doer rather than a philosopher. It represents the Art of medicine as well as the Science and, from the background of great tradition, improvises its tune. It is as proud as it is able. The profession is a fraternity which often times refuses to "waste time" attempting to fully justify its policies and its services in the belief that time will fully do so.

Perhaps the patterns of informal decision-making traditional to the organizational practice of yesteryear could be sufficient to meet the challenges of today and tomorrow. However, the complexities of today's social, political, and economic societies indicate the desirability of using the best tools extant for the rooting out, evolving and resolution of *reliable* information and the communication of this to medicine's policy makers. In this way the combined wisdom of doctors of medicine can be supplemented and buttressed in the decision-making process by current, extensive, knowledge and detailed truth. I have no fear of the decisions medicine will make if it has full access to reliable fact.

Today, constant improvement in the *distribution* of health care is important to the medical profession, to the individual doctor, to the public and to the individual patient. A balance of emphasis between the science of medicine and the distribution of medicine must be maintained if the fruits of the expanding medical sciences are to be fed to the profession's patients in a seemly, swift, and assimilable fashion.

Today's medical society values greatly the scientific progress contributing so markedly to medical success. The Society feels a primary obligation to its members to supply postgraduate education and to recognize and interpret medical scientific achievement. But because others can also do these things too, the average state and county medical society feels, and rightfully so, a more pressing need to make knowledgeable and binding decisions, and offer new and expanded services, in the field of health care distribution. It represents the profession in relationship with others in the health industry. The profession through this collective voice should determine policies and methods of medical practice and share in making the more important decisions involved in the distribution of health care. In order to do this, the medical society must refer to the past insofar as medical education and medical licensure are concerned, with some reference to sociological history. It also must refer to recent developments in both medical science and methods of establishing and defraying medical costs.

It is a vital necessity that these societies from time to time go through the heart-searching process of clarifying objectives of both a near-term and a long-range variety. The development and clarification of objectives does not in and of itself provide an orderly means for reaching such objectives. Required for this purpose is the establishment of priorities. Here again, a thoroughly researched effort is required. Factors such as personnel, finances, politics, and time must be taken into account and hardheaded decisions made, consistent with the practicalities involved as well as the hoped-for accomplishments.

Also, in the final reckoning, the effectiveness of the medical society action will be directly proportional to the success of its appeal to its members. Each physician must answer for and to himself how he can bear his fair share of the total professional responsibility of medicine. If a great proportion of members of the medical profession make available to their colleagues their individual talents in collective effort, their societies can hear and amplify the individual's voice thus maintaining basic freedoms through collective action.

An organization such as the Tennessee Medical Association must be continuous in its activity, current in its decisions, intelligent in its use of truth, and somehow always represent the majority view. This introspection against a background of social consciousness is necessary if your leadership provides vital unity and harmony of action, in the public interest. May I elaborate on some of the problems facing medicine to help support the above generalizations. In investigating the possible subject areas in which highest priorities for action by medical societies exist, the entire range of their interest can be divided into roughly a dozen substantive sections:

I. *Science Research and Quality.* Most medical societies do not support medical scientific research directly or financially, however, their members do, and the societies can determine upon programs whereby new scientific breakthroughs can be put to use and their effect upon the total practice of medicine evaluated. Just the determination of the efficacy of medical scientific services as they are presently applied in the offices and hospitals by doctors of medicine would be of great value. Another very real service needed is the development of a generally accepted approach toward evaluating the quality of medical care. The present wide divergence of opinion on such an approach causes internal dissension among doctors and permits cynics to see poor quality where only good exists. The three methods now used are:

(1) Judgments based on the *outcome of medical care*—recovery, restoration of function, survival. These are based on such things as studies of perinatal mortality, surgical fatality rates, social restoration (of psychiatric patients).

(2) Judgments based on the *process of care*:—the appropriateness, completeness and redundancy of information obtained through clinical history, physical examination and diagnostic tests; justification of diagnosis and therapy; technical competence in the performance of diagnostic and therapeutic procedures (including surgery); evidence of preventive management; coordination and continuity of care; acceptability of care to the patient, etc.

(3) Judgments based on the *structural approach:* considering the facilities and equipment available; the qualifications of medical staff and their organization; the administrative structure of programs and institutions providing care; fiscal organization, etc.

Obviously each of these has its limitations but a reasonable combination of them simply stated might prove to be a valuable yardstick for use by the profession and public alike in determining quality.

Also much can be gained if organized medicine could apply its members' "know-how" to the scientific advances being made in other sciences related either to medical science or more particularly to medical practice. In regard to the latter, programs are underway in the field of data processing and the use of computers in the *keeping track* of what has happened, what is happening, and what can happen in a medical world where change is proliferating at unheard-of speed. The potential is far greater than even our imagination can conjure up today.

II. *Medical Education and Postgraduate Medicine.* Medical educators are sometimes criticized for failing to impart at the student level the social and economic aspects of medical care which the private practitioners feel to be equally important to the welfare of the patient, the physician and the public. The medical profession feels generally that it is time for the medical schools to impart that "education" which will provide a larger view of man and of health care responsibilities. But it will require the leadership of the physician and the medical educator, acting as brokers for the sick, to exploit for medicine what can be harvested from other parts of the university—from social or behavioral sciences, the humanities, and from other fields of professional application such as engineering, business and public administration, social work, thereby bringing into contributing roles for medicine far more kinds of scholars and scientists than are now regarded as related to medicine and health care.

It is becoming increasingly apparent that medical schools will play a greater part

than ever before in determining the medical practice patterns of the future. It is equally apparent that if organized medicine is to have an influence upon these patterns, it must work with the schools. Organized medicine has much to offer schools. The schools must avoid letting academic egotism blind them to the needs and potentials involved in the practicalities of the practitioners which may seem trivial at first glance.

III. *Ethics, Discipline, Professional Qualifications, Standards and Morals.* More and more medical societies are placing in a separate independent body, such as that of a Judicial Commission, the responsibility for the ethics, discipline, professional qualifications, standards and morals of the profession. Much remains to be done however, towards solving the knotty question of the handling of incompetent physicians. Also, despite progress on the national level, there is need for the codification, review and adoption of moral principles as they relate to medical practice in accordance with local customs and usages of the profession. This calls for the development in detail and in writing of matters of ethical policy,—not necessarily involving issues of morality,—arising from new patterns in medical practice. To indicate but a few: The extent of the responsibility of organized medicine for physicians outside its membership; the development of definite and reasonable standards of a physicians abilities, character and ethics as an extent of the requirements of the staff bylaws of private hospitals; the resolving of questions such as abortion, personal overuse of narcotics by physicians, the ethics of clinical investigation of new drugs in research; the ownership and operation by physicians of various types of laboratories, etc.

IV. *Legislation, Forensic Medicine, Laws and Regulations Governing Medicine.* The impact of government upon the practice of medicine due to the volume of new laws recently passed, plus the massive effect on medical practice threatened by additional laws being proposed in spiraling numbers, both at the state and the federal level, has forced organized medicine to devote an ever-increasing amount of attention to law and the privileges of practice it permits. People's ideas (some of them meritorious, some of them highly impractical) rapidly emerge as legislation; legislation passed rapidly accrues a mass of satellite rules and regulations.

Particularly, organized medicine must concern itself about the practice privileges sought by practitioners of podiatry, optometry, chiropractic, psychology, etc., because privileges frequently sought are beyond the demonstrated education and expertise of the petitioners. It is not unusual for the public and members of legislature to misconstrue medicine's real motives in advocating caution regarding such legislation. The medical profession has long taken upon itself the necessary responsibility of being in the forefront of those who oppose cultism in all its forms. One of its responsibilities is to constantly conduct a war on "medical quackery."

Much factual data must be developed and effectively disseminated to counter efforts currently being made to convince the public that medicine has failed and will continue to fail to meet its challenges under the systems which it has developed over the years.

V. *Economics, Organization, and Business Problems of Private Practice.* It is important that we do not permit the economics and business problems of private practice to kill the essence of professionalism. Yet we must change to meet the changing times. Let me elaborate on this.

Some members of the professions, in seeking to establish their income, damage the reputation of the word "profession" and with it the meanings of professionalism. A fine roentgenologist said to me "The medical profession is a business. Why don't we act like one and forget this 'professional' nonsense?" An attorney said: "I'm in business for myself. I'll make a buck where and when I can, from whomever hires me. There are two sets of ethics—one for the big boys who can get away with it, and one for the little guys who have to do it the hard way. Professionalism—nuts!"

Now, while the concept of professionalism is weakened from within, who seeks to provide the knockout punch? Strangely enough, it is both industry and labor. The

professional man can never be a union man because these concepts are in direct contrast to one another. The union man gains his strength from his power to strike; the professional man's power lies in his unique ability to serve. The unions recognize that they cannot control all the professions by forcing them into union membership, so they seek to gain influence over them through legislation which would place professions in the same category as public utilities.

Industry, on the other hand, considers professional skills among the costs of production. It wants to predict and, if possible, control these costs. So industry places professional men in salaried positions where it can control the cost even though in doing so, it robs them of the sine qua non of professionalism—the right to render advice without being "second-guessed."

What will happen if this trend continues? The salaries and fees of all professional persons will be set by someone else either by wage negotiations or legislative fiat.

The pricing of professional services was, at one time, a casual and personal affair. It was an act of confidence between the doctor and his patient. Professional traditions dictated that payment must be secondary. Indeed, if one were to remove from our civilization's literature the many fables about the foibles of professional people as they accepted remuneration for their services, the loss in humor and pathos, poesy and prose would be substantial. Unfortunately for both patient and doctor, that *attractive* casualness, that *fine* feeling of privacy, that *opportunity* to give one's time and talent and warm oneself thereafter in the glow of the patient's adulation or public acclaim are rapidly disappearing. In the place of such satisfaction is growing the fruit of the market place—money . . . cold, hard, systematic, cash register money.

Today, the medical profession is faced with the problem of pricing medical services in such a manner as to permit doctors to guide their own professional destinies, of developing such systems of payment of our professional services that will satisfy their economic wants and yet permit them to maintain those professional attributes so essential to the rendering of high quality professional service. To explore the problem a little further we must answer two questions:

(1) Why do professional people have to change from our habitual and customary patterns of receiving payment for services and,

(2) What are the vital elements of professionalism so that professionals must not permit any new economic or business systems to impinge upon, impugn or destroy?

To answer the first question—why change—we are equally, and sometimes painfully, aware that science is changing, growing, developing every hour. In point of fact, doctors *individually* cannot keep up with their science so they have no choice but to specialize. And, specializing, there is no choice but to work with other specialists in the profession to serve the whole man as he exists in society. To cite an example, consider the professional team that is necessary to rehabilitate a child born with harelip and cleft palate. A pediatrician is needed, an oral surgeon, an orthodonist, a psychologist, a speech therapist, not to mention anesthesiologists, nurses, social workers, hospital administrators, and other supporting personnel. I make the point that, because of the sheer advancement of science, medicine has had no choice but to change its ways of professional practice and because of that physicians can no longer be paid in the same casual, personal, private way they once were.

Let's take the scientific side just one step further. The old sciences have begotten new sciences and the new sciences have begotten new professions. The old professions have begotten new professional technicians and the new professions have begotten new technicians. And these old and new sciences and old and new professions and old and new professional aides have begotten new mechanisms that can serve great numbers of people or can serve individuals greatly. All this too has necessitated change in the way professional payment is made. Also, capital outlay, personnel, depreciation, inservice training, administration overhead, ad infinitum, come into the picture and these demand an accounting

and the introduction of a methodology into the payment for professional service that is common to the financial community.

Speaking of the community—society has changed as rapidly as science. People estimate their needs differently today than 20 years ago and they want and expect more professional services. People live in different places and in different relationships to one another. Their transportation is different and this mobility has changed the food and the clothes and the very environment in which we live.

Why do I elaborate upon the obvious? Simply to emphasize that with such changes one can scarcely expect the systems of charging for professional services that were in harmony with a society of yesteryear to be compatible. A profession is a part of the whole world and must not be an anachromism.

To move to the second question: "What are those vital elements of professionalism that we must hold sacrosanct? What are those professional principles that we must not permit any new economic or business system to impinge upon?" Stripped of all the trimmings these essentials come down to the following freedoms of professional practice.

(1) The freedom to learn a science and its application and to be recognized for this attainment.

(2) The freedom to set and maintain standards of progress in technical competence and ethical excellence, that will best serve society.

(3) The freedom to render professional services to whom one pleases . . . when he pleases . . . where one pleases . . . at a price one wishes to charge.

(4) The freedom, conversely, to refuse to render these professional services for reasons of one's own.

These essential freedoms place on our shoulders the responsibilities that go with such freedoms. They are the vital professional freedoms we must defend. Each of these is subject to question today and each of them is imperiled.

When the peril is in the form of economic seduction, monetary traducing if you will, the peril is not easily avoided. So pricing of professional services—and thus payment for them—is a vital factor in professionalism because it can destroy the finest elements of professionalism.

What is the answer? The false but often-heard answer is "We, the profession, will decide our salaries or fees. Period! If those who are paying for the service don't like it they will have no recourse for we have a monopoly." This is a tiresome refrain and a dangerous philosophy. It can work for the laborer because society can wait for his service; but society cannot wait for services which are essential to human life and progress. How stupid to take the approach of the law of the jungle when professions have their basis in the laws of civilization. How impractical to demand a monopoly and expect to be permitted to use that monopoly against the best interests of the society that grants it!

The answer to professional pricing lies in a much more sophisticated variety of collective bargaining, by professional associations, a variety where the carrot is the symbol instead of the club. We can offer today's high quality of services but limit them to meeting basic needs when pricing does not permit the rendering of the limitless variety of service.

Needed is a more complete general model of the market for medical care services and of the factors which cause change in amount and price of services provided. Economic incentives are strong even in medical care. It is vital that a committee for the study of negotiation for professional services should be established. Fees for doctors services to governmental agencies and to many industrial and business units are already being informally but nonetheless positively negotiated. These procedures will grow more formal as time goes on. Already in many states the law makes formal negotiations necessary for all governmental employees including doctors.

VI. *Communications and Public Relations.* Few fail to recognize the necessity existent today to have public approval and support of any program that affects the social and economic environment. Since practically all medical programs have such an effect, the use of mass communication and per-

sonal influences to induce support is mandatory. Although the doctors "systems" for supplying medical care are usually accepted and the burden of proof is upon those who would change the system, nonetheless, the public must constantly be resold on the current progress being made and the new health systems the physician constantly inaugurates.

VII. *Civic and Community Affairs.* A good example of the necessity for medicine to participate in civic and community affairs is demonstrated by the urban health problems and the need for their solution currently facing every area of the nation. The health of millions who dwell in our cities is intimately related to the welfare of every state and nation. Organized medicine cannot fail to recognize and discharge its responsibility to study the health problems of the disadvantaged in cities and throughout the nation. Medical societies are beginning such studies. At the same time the obtaining of persons who will listen in positions of political strength remains an ever present problem of the medical profession. To evoke political respect, it appears that the PAC movement offers greatest potential.

VIII. *National and International Affairs.* Surprisingly enough every state has responsibilities in the field of international relations. Experts on foreign affairs have repeatedly pointed to the fact that doctors working in foreign countries have created more goodwill than any other "diplomacy" of this nation. Obviously the AMA is the proper organization through which to work but it needs greater support in this regard than it has had in the past from state and local societies.

IX. *Governmental Medicine.* This is a great area in itself because governmental medicine is descending upon the medical profession in an accelerating procession of events, regulations and directives. As I have already indicated it is a focal point of concern to all physicians. No single force is more important in either the scientific or socio-economic side of medicine than that of government. The only answer is for the medical profession to be better informed, more alert, and more unified than governmental agencies. "Government" is not a single unit but is many diverse units each with separate jealousies, budgets, loyalties, and responsibilities. If the medical profession remains unified, flexible and active, it can "call" enough decisions to maintain the freedom of practice so essential to the physician's success and to the society's professional life, despite those often stultifying governmental edicts.

X. *Sociological Medicine.* It has been said (at the Ribicoff hearings) that "little attention is paid by the medical world to such causes of social diseases as parental inadequacies, overcrowding, the oppressive threat of scientific war, inadequate educational opportunities, the nontherapeutic use of leisure, the misuse of the mass media, or the suppression and persecution of minority groups." Such testimony blithely blasts Medicine because the doctor is not a social-scientist, theologian, lawyer, international diplomat, educator, or communication specialist. Medicine *is* a part of larger societal concerns but it has plenty to do if it stays in its own bailiwick without attempting unduly to invade the province and assume the responsibilities of other professions. Actually most medical societies have many committees strongly involved in working toward the betterment of society within the confines of their separate subject areas.

XI. *Occupational and Institutional Relationships.* Medicine must be pragmatic. Many things are contributing to the increased demand for medical services in addition to the increasing population. More and more functions previously expedited in the physicians office are now becoming more time-consuming functions of the hospital. The idea of comprehensive care has shifted some emphasis to the hospital which is being nominated to become the community health center. It supposedly will coordinate the resources available and make possible comprehensive health care to all the people. This in turn brings to the fore the subject of utilization, the correct and most effective use of the resources available, which in turn brings into place systems research people, offering such ideas as the composite weighted work unit. I mention these because it is apparent that the doctors must develop active occupational and insti-

tutional relationships and care must be taken to avoid schisms with the hospitals and other professional groups.

XII. *Medical Organization.* Each of the various associations in the system of organized medicine is making self-appraisals from the AMA on down; each affecting the other. Change in the form of structural revision of medical organization as well as operational flexibility is a continuing challenge. In like manner, lack of change is equally directive. The characteristics of both the physician and his organization are adherence to traditions of training and practice conditioned by his own culture and class. In this respect they are identical to that of the other great professions. But inasmuch as the medical profession in company with the other professions possess the world's knowledge and organize it, they must continue to ethically govern its application in the social welfare and in doing so meet change with change.

In the increasing world-wide society, change is taking place at a remarkable and perhaps dangerous rate. As Sir Charles Snow, the English novelist puts it: "The ingredient that we are remarkably and dangerously short of is foresight." Every man who is a professional in the truest sense realizes that he knows more than did his predecessors, and he also realizes that he will be out-dated by his sons. So we must reckon that while the future grows out of the present, it always turns out to be different. To possess and nurture wisdom and foresight is today's and tomorrow's awesome responsibility of the educated people of this world.

Professions are growing—there were 250 CPAs in 1900; in 1960 there were 50,000—this will be doubled by 1970. Since 1850 the working force has increased 8 times—a typical profession 25 to 300 times. Within the last five years: "Professional technical and managerial" people have become the largest single group in the working population. The professions are attractive and becoming more powerful.

This dramatic increase has helped to cause the growth of doubts on the part of the public as to whether professions are becoming predatory conspiracies against society. The question has been asked whether professional autonomy is becoming a license from the public which grants the opportunity to exploit the public.

In consequence it has become of vital importance that the true nature of professionalism be made known to the public and that today's professional leaders realize that self regulation and ability to include (and exclude) members on a professional basis does entail monopoly privileges. They must be used in the public interest—a grave responsibility—and at the same time a great source of strength.

There are many other difficulties in fully assuming this responsibility of always working in the public interest.

(1) Fences between compartments of traditionally organized knowledge keep falling down. Yet we persist in preserving scientific disciplines along outdated lines of organization.

(2) We sometimes take for granted that the careers now available have been with us always and that their status will remain essentially the same in the future. Whereas nothing about today's life can possibly remain static.

(3) There must be a continuously dynamic and restless development of "new" professions. No profession was endowed full blown by the creator—all have emerged from arts and crafts or occupations bearing upon necessary public interests. Insofar as the "new" or 'incipient" professions are concerned, they are of all professions the most insistent upon professionalism.

(4) There must be a never ending realization that the motives and conduct of the professional are of equal if not greater importance than his sheer ability.

A profession is a unique, definite and essential social service. In sum, its task is the application of truths together with human perspective and judgment to the needs of society.

It would be easy to face inward upon ourselves and, perhaps without too much difficulty, to increase our luxuries, but that is not the course of sanity or of enlightened self-interest in this troubled world, whether we are thinking of the community, state,

national or international level. It would also be false to the professional ideal of service.

"Whatever your career may be, do not let yourselves become tainted by a deprecating and barren skepticism, do not let yourselves be discouraged by the sadness of certain hours which pass over nations . . . say to yourselves: 'What have I done for my instruction?' and, as you gradually advance, 'What have I done for my country?' until the time comes when you may have the immense happiness of thinking that you have contributed in some way to the progress and to the good of humanity. But, whether our efforts are or are not favored by life, let us be able to say, when we come near the great goal, 'I have done what I could.'"

Such was Louis Pasteur's counsel to the young physician.

I could offer no better.

* * *

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Political Action and the Physician*

BLAIR J. HENNINGSGAARD, M.D.,† Astoria, Ore.

Well, the quadrennial blood-letting is over. The body politic—pale but relieved—is resting quietly in the recovery room.

The Nation's press, having spent upwards of ten months playing the Guessing Game, is now busy explaining why it was right all along. As for the pollsters, they spent the last two weeks before election searching for a seventh son of a seventh son, born with a caul, and subject to authentic visions. There being few of these sons available in the off-election years, Messrs. Gallup, Roper and Harris were reduced to the ignoble but safer course of hedging. In all fairness, we cannot blame them.

We now have a President-Elect by the hairline margin of a plurality; a House and Senate controlled by his opposition party; and our old political groupings in massive disarray.

But certain observations are valid.

The Solid South isn't solid anymore. It went thataway—except for Texas.

The Senate races turned out well for the Republicans, with a pickup of 5 seats. Notable among these was the race in Oregon, where the frost is on the pumpkin and the Morse is on the Wayne.

The GOP is 4 House seats stronger—less than expected but hardly surprising. There was not that much Democratic fat among the marginal seats after 1966, and the coattail effect of Mr. Nixon's victory was conspicuous by its absence.

The Republicans picked up 7 governorships—in Delaware, Illinois, Indiana, Iowa, New Hampshire, Vermont and West Virginia—while dropping only 2 (in Montana and Rhode Island).

The 91st Congress will be more conservative than its predecessor as the locus of the nation's political power shifts slightly to the right of center.

The Nixon strategy of concentrating on such Border states as Tennessee apparently paid off, but it made victory in the industrial states much harder to come by.

As for the Democratic Party, the pre-election forecasts of its imminent demise were somewhat premature. Somehow, it pulled itself together—however unhappily—in time for the voting. Labor's last minute struggle to get out the vote, coupled with a do-or-die effort by some of the old party organizations, almost turned the trick.

Mr. Johnson's bombing halt was the sort of dramatic announcement that can create an overnight shift in voter sentiment of at least 5 per cent from one candidate to the other. It undoubtedly helped Humphrey, and probably would have helped him even more if it had been delayed until the Friday before election. But that would have been political, and the very thought of it would cause the responsible statesman to recoil in outrage.

Perhaps the only solid factor in the campaign was that Mr. Nixon's predicted percentage of the total vote remained constant throughout, with Humphrey and Wallace jockeying for support amongst the balance of the electorate.

And how did the PAC movement show up in all of this? Extraordinarily well. AMPAC itself was involved in 162 House races and roughly two dozen contests for the Senate. We batted around .700 which is pretty fair for country ballplayers new to the Big Leagues. For purposes of comparison, COPE was in 76 House races, winning 44 and losing 32 for an average of around .579. But figures like this only tell half the story. Our State PACs were probably in a hundred more House contests, another handful of Senate races, and many hundreds of campaigns for the State Legislatures.

And the upshot is that medicine has more friends than ever before on both sides of the aisle. That's political action—*effective* political action. I think we have a right, as physicians, to feel proud of the effort we made and the results we helped to achieve.

What does this augur for the future?

*Presented at the Fifth Tennessee Medical Association, State and County Officers Leadership Conference Nov. 17, 1968, Nashville, Tennessee.

†Chairman, AMPAC Board of Directors.

Beyond predicting a more favorable legislative and executive climate for medicine, I offer you no specific predictions. Too many scratches and nicks mar the surface of the crystal ball; and besides, we can always listen to such licensed soothsayers as Sander Van Ocur, the boy oracle of the airways.

My assignment is to talk about political action and the physician—and I had better stick to it.

Let's begin with a basic question—should physicians get involved in political action to begin with? You would be surprised at the number of our colleagues who think they shouldn't. At least I *think* that is what they think. But I base this judgment on the fact that tens of thousands of doctors, while voicing no disagreement with the concept of political action, have neither joined nor otherwise supported the PAC movement.

Tens of thousands more *have*. I contend that tens of thousands more *should,* and ultimately will. For doctors are reasonable and logical people, given the chance. And sooner or later the uncommitted physician will opt for political action if for no other than one single, pragmatic reason: It works!

No one denies that medicine has problems. Doctor Howard has spelled some of them out for us far more eloquently than I could do. He has also made it clear that our profession is hot in pursuit of workable solutions. No doubt some of those solutions will require governmental action of one sort or another. But many of them must come from the private sector, and *will* come from the private sector if we are given the time in which to develop them.

But if we are to have the time we need, we must have legislators who recognize the complexity of the problems we confront; who accept our determination to solve them; and who believe that the private sector should, where possible, develop the solutions we all seek.

Consider, for a moment, the sort of men and women who make out laws. There are few geniuses in public office—or any place else, for that matter. And we have no legislators that I know of who are brilliant on every subject. There are few perfect laws —if any—because those who make them are fallible human beings even as we, ourselves, are fallible.

The lawmaker is an overworked, harassed man who tries to do the best he can on the basis of what he knows. Basically, he tends to fall into one of three categories. One sort digs deeply into a single phase of government and becomes well-informed about it. A second studies all phases of government, dipping not too deeply beneath the surface, and emerging glib rather than well-informed. The remainder rely upon their rather unexamined convictions, tempering them now and then with a smattering of the knowledge their more diligent colleagues have amassed.

So what happens when the time comes to legislate? The village blacksmith—hoping for the best—sets out to remove an appendix. It does not help much for the onlooking physician to remark that this is a clear case of a man practicing medicine without a license. The patient is already stretched out beneath the chestnut tree, his head resting nervously on a spare anvil while the hand accustomed to the sledge takes up the scalpel. Well, you can't throw the blacksmith out of the medical society because he was never in it. And you can't stop him from operating if he really wants to get bull-headed about it. But you can show him where to cut, where to tie, where to suture, and hopefully—how to avoid the more fatal errors. You will have an even better chance of saving the patient if you can persuade your blacksmith friend that he is not necessarily an expert diagnostician, that surgery is contraindicated, or that if cut he must, he can profit from a little expert advice.

I am saying that if health legislation is required, we, as a profession had better see to it that the *ins* and *outs* of the subject are clearly and persuasively explained to our legislators. And who knows more about health than physicians do?

Even when the law has been written, our problems have not ended. There is the business of implementing the law which falls into the hands of an administrative agency of the government. Someone once remarked that the power to tax is the power to destroy. Let me add that the

power to regulate can also be the power to destroy. So once more, we are required to deal with government—this time, through the appointed officials.

This is not a simple task, this process of working with government. The range and complexity of government outrace comprehension. Consider only the multifaceted aspects of health care, and how it is to be provided; and then consider that a legislator must not only make laws dealing with health, but laws dealing with taxes, foreign policy, urban problems, transportation, defense, the conquest of outer space, and what have you.

It is not enough to give the blacksmith a first aid book and leave him to his own devices, for a little knowledge can be a dangerous thing. We must first inform this man—and do it thoroughly—or the prognosis is bleak. It would seem to me that these matters are self-evident.

Yet there are still physicians in this country who view political action with faces longer than their memories are short. You see them queueing up for a place at the Wailing Wall, and their laments about the shortcomings of their government would move a heart of stone.

But government in a free society is what free, participating men and women decide to make it. It is as good as we deserve and no better. And when you view the political dropouts of this country—some of our colleagues among them—it is remarkable that we have done as well as we have. The major diseases of our society do not originate in legislative chambers. But neither should all of the cures be sought there.

And so we come to the concept of public affairs. The AMA has now reconstituted its Field Service into a Division of Public Affairs. Why? What for? And what is public affairs, anyway?

Let's clear the decks with a few definitions before we tackle those questions.

Political action is nothing more than candidate support. AMPAC and the State PACs exist primarily to support candidates. Political education is a broader term. It includes everything from a lecture in civics, to a film on how to conduct a House campaign, to a drive against vote fraud.

Both political action and political education—naturally—have a political effect. But political action—or candidate support—has a *direct* effect on who is elected; and political education has an *indirect* political effect on anyone—in government or out—who is exposed to it.

There is, however, the important legal distinction that political education can be financed with corporate funds, whereas candidate support must be paid for with the voluntarily given dollars of individual people.

Which brings us to the term "public affairs." Public affairs does not mean, as the term would suggest, the overt conduct of extramarital relations. Rather it means nearly everything that has to do with government and our relations with it. The AMA's new Division of Public Affairs is concerned with a wide variety of medicine's relationships with government. It is concerned with legislation; with the dialogue between a physician and his Congressman; with political education in its broadest sense; with the provision of quick, accurate information to the Congress and the administrative agencies of government.

AMPAC remains the vehicle—the sole vehicle—for candidate support. Its importance has been diminished not one iota, and I speak from the vantage point of AMPAC's Board Chairman. AMPAC's function of providing political education has, from the beginning, been secondary to its function of candidate support. So hereafter most of our political education will be done by the Division of Public Affairs.

This does *not* mean that political education is being deemphasized. To the contrary, political education is being "beefed up" more economically, more efficiently, with the more readily available resources of the AMA itself.

The field service staffs of the AMA and AMPAC have been amalgamated, with twelve men now working for the Division of Public Affairs. This does not mean that there are no men available for candidate support. It simply means that when a field man gets involved in candidate support, his salary and expenses will be paid by AMPAC. And there are now twelve field

men available for the purpose instead of eight. The rest of the time the field men will be engaged in legislative and political education programs in behalf of the medical profession.

There is another organizational change involved here: The new Division's field men will be located within the areas to which they are assigned. Art Seeds, for example, will work from an office in Memphis and serve not only Tennessee, but Alabama, Arkansas, Louisiana and Mississippi. The thinking behind this decision is based upon considerations of economy, efficiency and service. And it is based upon the recognition that legislation, political education, lobbying, candidate support—any endeavors bearing upon medicine's vitally important relationships with government—are interrelated.

With the exception of candidate support, which must remain separate and apart under the strictures of the Federal Law, all of these activities are part and parcel of public affairs. As such, they belong under a single roof. As such, they are most easily and effectively directed and coordinated under a single chain of command.

What is evolving, Mr. Chairman, is a streamlined, uncluttered table of organization designed to enhance medicine's capability of dealing properly with government.

Please note that I said *medicine's* capability, our entire profession's capability. For we in AMPAC work for medicine just as the AMA does. We are separate from the AMA because the law requires us to be—not because we want to be. We are separate as one arm is separate from the other: but sharing the same bloodstream, dependent upon the same oxygen supply, responsive to the same central nervous system, obedient to the same will and direction and intelligence.

The medical profession is in politics because politics is the matrix of government. Government is involved in a great many aspects of health. The better the people we elect, the better our government will be. The better we can guide our elected and appointed officers in matters pertaining to health, the better off the nation will be.

These are simple truths, but we overlooked them far too long. The medical profession is in public affairs for the sake of the public and the individual physician, who together share a common concern for the nation's health. It is time for the individual physician to recognize it: for the sake of his patients, for the sake of his freedom to practice the best medicine of which he is capable, and for the sake of the profession he loves.

* * *

ACUTE MYOCARDIAL INFARCTION: Influence of a Coronary Care Unit by Robert M. Marshall, S. Gilbert Blount, Jr., Edward Genton, Arch. Int. Med. 122: 472, 1968.

The authors point out that the mortality of acute myocardial infarction in many large Metropolitan Hospitals has remained a discouraging 30 to 40% with serious arrhythmias accounting for an estimated 40% of these deaths. During the 1960's the coronary care unit has become established as a way of reducing the number of deaths occurring in patients with acute myocardial infarction, particularly those deaths attributable to acute arrhythmias.

In this paper the authors attempt to assess the efficiency of the coronary care unit in caring for patients with myocardial infarction and in treating acute arrhythmias as compared with patients with myocardial infarction not so treated. They compare the course of 100 consecutive patients with proven acute myocardial infarction admitted to the medical wards at the Denver Veterans Administration Hospital, with 105 myocardial infarct patients monitored in a coronary care unit at the Colorado General Hospital over a 17 months period. Both groups of patients were treated by the same physicians and had similar clinical characteristics and electrocardiographic features. Arrhythmias were observed in 80% of the monitored patients and in 58% of the patients at the Veterans Hospital who were not monitored. Ventricular fibrillation in "good risk" patients occurred in 9% at CGH and in 19% at VAH; 57% of monitored and 12% of unmonitored patients were resuscitated and revived. Resuscitation of all cardiac arrest in the first week occurred in 37% and 4% of the two groups respectively. Total mortality at the CGH was 19% and was 33% at the VAH. This difference in mortality between the two hospitals was significant (P equals less than 0.035). The reduced mortality in the CCU group appeared to result from improved facilities for recognizing and managing ventricular fibrillation when it occurred in the first week of hospitalization.

The authors conclude that it is clear that the coronary care unit is an essential part of the successful management of the patient with myocardial infarction. (Abstracted for the Middle Tennessee Heart Association by Robert M. Hollister, M.D., Franklin, Tenn.)

Much is written currently about comprehensive health care, including the varied aspects of preventive medicine, as an ideal to be sought. Years may need to elapse before proof is forthcoming as to its efficacy in guaranteeing better health or increasing life expectancy. The author points to the heavy service load implicit in comprehensive health care, and warns against embarking upon this too lightly. One might suggest that at a time of manpower shortage, involvement of any appreciable segment of the profession in comprehensive care might lead to deterioration in the provision of adequate medical care for episodic illness.

The Utilization of Medical Services by a Family Clinic Population*

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Introduction

Comprehensive medical care programs within a teaching setting are currently operational in a number of medical schools in the United States. The excellent review by Snoke and Weinerman[1] describes the educational features of some of these programs in considerable detail and also comments on the limited literature on the subject of comprehensive care. Even more scarce are reports evaluating the medical care features of such programs since most of them are concerned with educational evaluation. Information on several of the large medical care programs is extensive but not illuminating so far as the small teaching type of programs in medical schools are concerned.[2,3] This report is an analysis of the utilization of medical services by a group of families which received comprehensive medical care in the Family Clinic of Vanderbilt University Hospital, and a control group which has received medical care in the clinics and wards of Vanderbilt University Hospital.

Family Clinic Organization and Objectives

The Family Clinic was organized in September of 1956 as a combined effort of the Department of Preventive Medicine and Public Health and the Department of Pediatrics. Its purpose was to furnish comprehensive medical care for a group of families as well as to provide a source of patients for the teaching of comprehensive medical care and preventive medicine to medical students.[4]

The Family Clinic has been staffed by three internists, a pediatrician, an obstetrician and gynecologist, a public health nurse, a social worker, and a psychiatrist on call. Administrative staff has included a clinic secretary and a clerk, both experienced in dealing with people and well oriented to the goals of comprehensive medical care. Until a curriculum change four years ago, all fourth year medical students served in the Family Clinic one afternoon a week for six weeks. After that time, the Family Clinic experience became an elective for fourth year students.

Comprehensive medical care as practiced in the Family Clinic has included health promotion, specific protection, early diagnosis and treatment of illness, and rehabilitation as outlined by Leavell and Clark.[5] The original criteria for selection of families were: (1) easy accessibility of patients (for convenience of students) with all families chosen from the Nashville Metropolitan area; (2) a regular source of income; (3) young parents with fewer than 5 children; (4) willingness of the family to cooperate and attend the clinic; and (5) absence of terminal illness or overwhelmingly chronic medical or social problems.

Since the beginning of the Clinic, 262 families have received services at one time or another. Currently, 86 families are actively participating. After a family has joined the Family Clinic, each member is given a baseline evaluation which includes a complete medical history and physical examination as well as laboratory examinations consisting of a chest x-ray, urinalysis, hemoglobin and packed cell volume, serologic test for syphilis, electrocardiogram, a 2-hour post prandial blood sugar determination, tuberculin and histoplasmin skin tests,

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an erythrocyte sedimentation rate, Papaniculaou smear of the uterine cervix, stool guiaic examination, and special procedures as indicated. Family members are brought up to date on their immunizations. The public health nurse makes a home visit for the purpose of obtaining information about the household composition and the environmental characteristics of the home and neighborhood. She makes a return home visit every year to bring the household roster up to date and to obtain additional information about the changes and problems within the home environment. Families assigned on an elective basis to first year medical students are visited by them periodically during the second semester as part of their training in understanding the patient and his medical problems in the family setting.

Purpose and Study Methods

The purposes of this report are: (1) to analyze the characteristics of the care which a selected group of families within the Family Clinic received, and (2) to determine how their care differed from that received by a group of control families attending multiple clinics.

Specifically, the questions asked were: What has been accomplished for these families in regard to health promotion, specific protection, early diagnosis and treatment, treatment of full-blown illness and rehabilitation? Health promotion was interpreted to mean well baby care, prenatal and postnatal care (at present pregnant mothers are referred to the obstetrics clinic for care until released by the obstetrics clinic), teaching of self-examination of the breast, weight reduction, accident prevention, counselling on marital problems, dental health, planned parenthood, and other services. Specific protection was concerned primarily with immunizations, including diphtheria, pertussis, tetanus, smallpox, typhoid, influenza, poliomyelitis, and others as indicated. Early diagnosis and treatment involved a periodic health evaluation accomplished for infants every 6 weeks for 6 months, then every 3 months until 2 years; children 2 to 5 years, every 6 months; age 6 to 65, once yearly; age over 65, every 6 months. The periodic health evaluation consisted of an interval medical history, a complete physical examination, a battery of screening tests which included a urinalysis, the total white blood count, hemoglobin and packed cell volume determinations, erythrocyte sedimentation rate, a 2-hour postprandial blood sugar, a cholesterol determination when indicated, tuberculin and histoplasmin skin tests, Papanicolaou smear of the uterine cervix, stool guiaic, sigmoidoscopy when indicated, chest xray and electrocardiogram. During the first two years of the clinic each individual had a psychologic screening and dietary history taken. Later these were done only as indicated. Treatment for acute and chronic illness received at the Family Clinic or under the supervision of the Family Clinic (at times other than the regularly scheduled return periodic health evaluations and rehabilitation services), were included in the services furnished which made up the comprehensive medical care package. The treatments were classified simply as other clinic visits and followups to differentiate from early diagnosis and treatment.

Composition of the Families Studied

Ten families were selected randomly from the Family Clinic roster for the study; the period analyzed, more than eight years, was from September 1956 through June 1964. Control families were selected at random from among families which had been active in seeking medical care at Vanderbilt University Hospital during the same years in which Family Clinic families had participated. Matching the two groups of families was according to number in the family, age of children and parents, race, and income. All information concerning the control families was obtained in retrospect from their hospital records or from a visit or phone call by the public health nurse. By making observations in retrospect, it was assured that the study procedures or personnel had no influence on actual performance in regard to medical care. Table 1 shows the composition of the Family Clinic and control families and the time of observation. The number of family members (57) was the same for both groups. The number of individuals within the two

Table 1

Characteristics of Families

	Total Patient Months in Clinic		Number of Families			Number of Individuals										
						White				Negro				Total Number of Individuals		
						Adults		Children		Adults		Children				
	White	Negro	White	Negro	Total	M	F	M	F	M	F	M	F	M	F	Total
Family Clinic	362	243	6	4	10	8	8	8	10	6	4	4	9	26	31	57
Control	362	243	6	4	10	6	7	8	13	5	4	7	7	26	31	57

groups of families was the same for both white (34) and Negro (23) families, although the distribution by sex was slightly different.

The 605 patient months of observation were the same for both groups of families as data were collected from the control families for the same period during which the Family Clinic families were being observed.

Results

The results are presented for four age groups: infants (birth through 1 year of age), preschool children (age 2 through 5), school-age (6 through 16), and adults (17 through 65). These age groups are further categorized according to the types of medical care received under the headings of health promotion, specific protection, early diagnosis and treatment, periodic health examinations, referrals following periodic health examinations, immunizations obtained at the Metropolitan Health Department or at school, and all other medical care received outside Vanderbilt Hospital. Care received by the control families at Vanderbilt University Hospital composed another category comparable with "other Family Clinic visits and follow-ups."

Health promotion services were utilized 268 times by Family Clinic members and 91 times by control family members. (Table 2A.) It is noteworthy that preschool control children received *no* health promotion services and only 4 of the school age control children received them at Vanderbilt University Hospital. Possibly these were obtained elsewhere.

Specific protection services were furnished on 415 occasions to Family Clinic members and on 68 occasions to control family members. (Table 2B.) None of the white preschool control children received specific protection services at Vanderbilt University Hospital, but probably did elsewhere as described below.

Early diagnosis and treatment procedures were performed 1,201 times on Family Clinic members and 454 times on control family members. (Table 2C.)

Periodic health examinations as part of early diagnosis and treatment were completed for Family Clinic members 233 times but only for 19 on controls (Table 2D). Periodic health examinations resulted in 50 referrals of Family Clinic members to other clinics (Table 2E).

Most of the immunizations for Family Clinic patients were given in the Family Clinic but occasionally these services were obtained at the Metropolitan Health Department. There were 78 instances in which immunizations were given by the Health Department to Family Clinic members, 268 to control family individuals (Table 2F). This difference might be expected since most immunizations (415) were carried out in the Family Clinic for their clientele and only a few (68) were given to control families at clinic or hospital visits; it is likely that most immunizations were obtained by control families at the Metropolitan Health Department although a few may have received them from private physicians.

Both groups of families received medical care outside of Vanderbilt University Hospital from private physicians, other clinics, or in the Vanderbilt University Hospital Emergency Service at times when the Fam-

Table 2

FREQUENCY OF SERVICES UTILIZED BY FAMILY CLINIC AND CONTROL FAMILIES

		A Health Promotion					B Specific Protection					C Early Diagnosis and Treatment					D Periodic Health Examinations					E Refers on Periodic Health Examinations				
		Infants 0-1	Pre-School 2-5	School 6-16	Adults 17+	Total	Infants 0-1	Pre-School 2-5	School 6-16	Adults 17+	Total	Infants 0-1	Pre-School 2-5	School 6-16	Adults 17+	Total	Infants 0-1	Pre-School 2-5	School 6-16	Adults 17+	Total	Infants 0-1	Pre-School 2-5	School 6-16	Adults 17+	Total
Family Clinic	Negro	20	6	4	70	100	34	42	34	43	153	24	75	97	282	478	21	27	17	28	93	—	3	3	17	23
	White	37	13	19	99	168	75	58	50	79	262	49	163	176	335	723	37	35	35	33	140	1	6	6	14	27
	Total	57	19	23	169	268	109	100	84	122	415	73	238	273	617	1201	58	62	52	61	233	1	9	9	31	50
Control	Negro	2	—	4	37	43	—	9	8	4	21	8	22	23	182	235	—	4	7	—	11	No known periodic health evaluations				
	White	16	—	—	32	48	40	—	1	6	47	30	5	2	182	219	—	3	4	1	8					
	Total	18	—	4	69	91	40	9	9	10	68	38	27	25	364	454	—	7	11	1	19					

		F Immunizations at Health Department					G All other medical care (outside VUH & VUH ER visits)					H Other Clinic Visits and Follow-ups					I Public Health Nurse's Visits in Home			J Social Service Referrals
		Infants 0-1	Pre-School 2-5	School 6-16	Adults 17+	Total	Infants 0-1	Pre-School 2-5	School 6-16	Adults 17+	Total	Infants 0-1	Pre-School 2-5	School 6-16	Adults 17+	Total	Number of Routine Visits	Other Visits	Total	
Family Clinic	Negro	—	6	15	9	30	6	15	9	54	84	2	8	8	41	59	20	1	21	4
	White	—	6	38	4	48	19	20	66	74	179	24	61	37	43	165	26	2	28	21
	Total	—	12	53	13	78	25	35	75	128	263	26	69	45	84	224	46	3	49	25
Control	Negro	17	64	54	—	135	5	7	20	19	51	2	10	38	80	130				2
	White	30	54	49	—	133	6	30	9	30	75	13	5	1	97	116	No known visits			1
	Total	47	118	103	—	268	11	37	29	49	126	15	15	39	177	246				3

ily Clinic or other general clinics were not in operation. Family Clinic patients availed themselves of these services (263 visits) over twice as often as the control group (126 visits) (Table 2G). In addition to these outside or emergency room visits, both groups of families attended other Vanderbilt University Hospital clinics for illness or follow-up. In the case of the Family Clinic families, 224 other clinic visits were made to the Family Clinic or the emergency room, and for the control families 246 visits to the outpatient department or the emergency room (Table 2H). These visits for Family Clinic patients were for illnesses and were different from visits classified as "Early Diagnosis and Treatment" since the latter were for well persons.

There were 13 hospital admissions for each of the two groups of families. Ten of the 13 admissions for Family Clinic members were for elective surgical procedures recommended following periodic health evaluations. Seven of the control family admissions were for pregnancy or complications of pregnancy. Only one of the admissions for a control family member was for elective surgery, the remainder were for medical or surgical illnesses discovered after variable times of duration.

The Family Clinic public health nurse made 49 home visits to the 10 families during the period of observation. So far as could be determined no public health nurse visits were made to the control families (Table 2I).

Twenty-five referrals were made from the 10 Family Clinic families to the staff so-

cial worker. Only 3 referrals from the 10 control families were made to social service. (Table 2I).

Discussion

How much medical care will people consume when comprehensive services are made easily available to them? It is obvious from the above results that the Family Clinic families, which were followed closely as a family unit within one clinic setting offering multiple services and consistent medical supervision and follow-up, availed themselves of many more medical services than the controls who, by and large, were left to their own devices. The control families, seen by numerous physicians in multiple clinics, sought and received preventive and early diagnostic procedures much less frequently than the Family Clinic families.

Utilization of the Family Clinic services by the members is heavily weighted in the area of preventive measures including health education and specific protection through regularly planned immunizations, early detection and treatment of illness facilitated by frequent and regular medical supervision. Regular visits to the home by the public health nurse and referrals to social service were other preventive and protective measures used effectively by the Family Clinic members. Undoubtedly, the warm rapport between the Family Clinic patients and the staff promoted the family physician image. Patients seemed confident and pleased with their medical care and oftentimes recruited friends and neighbors for the program. Obviously, the Family Clinic team, made up of the internist, pediatrician, obstetrician and gynecologist, public health nurse, and social worker, played the role of the family physician but with the added advantage of specialized training and shared knowledge from several disciplines. It was a highly educational experience in itself for the members of the clinic team to work in this family oriented program where the focus has been on health and prevention as well as disease and treatment.

The number of hospital admissions for the two family groups is too small to permit significant conclusions, but it is of interest that the majority of admissions of family clinic members were for elective procedures to correct abnormalities which were discovered through the periodic health evaluations. It is probable that close surveillance prevented hospitalization in many instances for the Family Clinic members, but medical calamities, if prevented, happily can not be measured or counted. On a fee for visit basis the Family Clinic families spent more on medical care than the controls, but since we have no accurate information on expenditures for hospital admissions nor costs of preventable chronic illness, no conclusions can be drawn on total costs to the families.

The question pertinent to all medical care programs which attempt to furnish comprehensive care is whether this type of care with its preventive services, close follow-up, and diligent search for early illness really results in better health or longer life for the recipients. These families were too young to furnish any conclusive evidence on the question of longer life. In regard to over-all "better health," only a careful evaluation of the health status of each family member within the two groups would give a meaningful answer. Some sort of "end result" such as that described by Shapiro[6] would be desirable but difficult to accomplish because families move away and are no longer available for study. Anyone contemplating furnishing comprehensive medical services to a group of families or patients or to a segment of a community, should be aware of and consider realistically the great amount of medical services the clients may consume and the heavy service load imposed on the professional staff. It is more difficult and time consuming to render comprehensive as opposed to episodic care and such programs should not be undertaken lightly.

Although it was not the purpose of this paper to elaborate on the use of the Family Clinic in the teaching program for medical students, it seems pertinent to comment briefly on this aspect. This particular Family Clinic has proved to be an excellent means of introducing the student to the concept of preventive medicine and comprehensive care. Within the Clinic, plus scheduled visits to the home, students are able to understand the patient, not as an

isolated being with a medical problem, but as an integral part of a family unit with a unique family history, psychologic problems, socio-economic, and environmental background. Through such practical clinical experience, the student is able to learn the need for and importance of consistent preventive and comprehensive health care.

Acknowledgements. I wish to acknowledge gratefully the untiring and generous help of the clinic secretary, Mrs. Addie Garant, the clinic clerk, Mrs. Lera Travis, and the public health nurse, Mrs. Raye Ozment for the many long hours they spent in helping to collect the data and prepare it for publication.

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There is still much to be learned about infectious hepatitis. Its epidemiologic pattern is not always clear which makes its control in a given community difficult. The authors have shown two epidemics over the years studied with endemic levels between, which correspond to similar patterns for the country as a whole as well as for this region.

Infectious Hepatitis in Memphis-Shelby County, Tennessee 1952-1967*

ROBERT C. RENDTORFF, Sc.D., M.D., MARK KASHGARIAN, M.D., and EUGENE W. FOWINKLE, M.D.,* Memphis, Tenn.

Infectious hepatitis continues to be a disease of considerable import and concern to the public health and to the practicing physician. This report deals with the experience of this disease in Memphis and Shelby County Tennessee. It is our purpose to describe the experience of a large Southern urban community with infectious hepatitis since it is believed that much can still be gained through continuation of the descriptive epidemiology of this disease in various geographic areas.

While our knowledge of infectious hepatitis is considerable, at the same time many features of the disease defy understanding. This current state of affairs exists despite extensive studies employing modern virologic techniques in an attempt to isolate the infectious agent or agents, despite magnificent studies demonstrating the transmissibility of the infectious agent in man, and despite the recent advent of the use of animal models in an understanding of this disease. Such lines of research endeavors will undoubtedly provide leads which will eventually give us a proper understanding so that effective control can be accomplished on a community wide basis. Recent adequate reviews have already considered these matters in depth and it is not our purpose to reiterate these aspects of infectious hepatitis.[1,2]

Materials and Methods

Infectious hepatitis is a reportable disease in Tennessee. Individual case reports are on record in the Memphis-Shelby County Health Department from January 1, 1955 to the present. There are no records of infectious hepatitis prior to 1952 and between 1952 and 1955 records are available only in the form of monthly total cases. All individual records available were tabulated on data processing cards to compile these statistics.

Descriptive Epidemiology

The population of Memphis-Shelby County, hereafter called the Memphis area, varied between the estimates of 507,000 for 1952 to 786,000 for 1967. Memphis is located on the Mississippi River, in the Mid-South area of the United States. Memphis is at an elevation of approximately 250 feet and the water supply is from deep artesian wells with an interconnecting system supplied by six pumping stations. The water lies in a sand strata at 500 and 1400 feet beneath the city with ground temperatures of about 64 and 71 degrees respectively. The water is a soft bicarbonate, low in sulfates and chlorides, and contains no organic matter nor harmful bacteria. Chlorine is not used in a routine manner but is available for emergency during repair of the water system. A small portion of the population in the outlying county does not have access to the artesian water system.

During the 16 year period from 1952 through 1967 included in this report, there were 2058 cases of infectious hepatitis reported in the Memphis area. The distribution of these cases is shown in table 1 and figure 1. These statistics are based on a semi-annual incidence of infectious hepatitis. It can be readily seen that two major epidemics occurred during this period, the first during 1953 to 1954 and the second and considerably larger outbreak between 1960 and 1962. Another significant aspect of

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Table 1

SEMI-ANNUAL INCIDENCE OF INFECTIOUS HEPATITIS IN MEMPHIS-SHELBY COUNTY 1952-1967

Year	No. of cases (6 mo. periods)	Rate per 100,000*	Year	No. of cases (6 mo. periods)	Rate per 100,000*
1952	57	11.2	1960	74	11.8
	49	9.7		73	11.6
1953	135	26.9	1961	164	25.4
	59	11.3		175	27.1
1954	79	14.8	1962	157	24.6
	42	7.9		92	13.8
1955	24	4.4	1963	63	9.2
	27	4.9		43	6.3
1956	37	6.6	1964	56	8.0
	22	3.9		58	8.3
1957	47	8.1	1965	49	6.8
	25	4.3		55	7.6
1958	17	2.9	1966	61	8.3
	20	3.4		68	9.2
1959	17	2.8	1967	87	11.7
	55	9.0		71	9.5
			Total	2058	

*Population denominators estimated from decinnial census of 1950 and 1960. Yearly or epidemiologic year rates may be obtained by adding two adjacent rates.

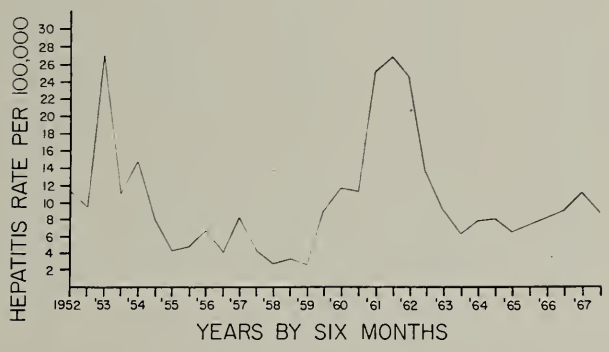


FIG. 1

infectious hepatitis in the Memphis area is that the interepidemic level of hepatitis is at a considerable higher rate since the 1960-62 outbreak than prior to this outbreak.

Table 2 depicts infectious hepatitis between 1955-67 by age group, race, and sex. Considering first the race and sex distribution it can be seen from the table that there were 565 white males, 536 white females, 309 Negro males, and 229 Negro females recorded to have had the disease. Corresponding rates based on the 1960 census indicate the white males at a rate of 22, white females 20, Negro males 22, and Negro females 15 per 100,000 population. With the exception of a slightly lower rate among the Negro females there appears to be no real difference in terms of the race and sex distribution of the disease.

Table 3 shows the distribution of infectious hepatitis rates per 100,000 by age groups for each year from 1955 through 1967. These statistics as shown in figure 2 are quite revealing. It can be seen that the epidemic of 1960-62 was comprised chiefly of the ages 5 through 29. The age group 0 to 4 years contributed little to the outbreak, while the ages 50 and over and particularly ages over 60 did not contribute to the outbreak.

Seasonal distribution of cases of infectious hepatitis in the Memphis area from 1955-67 is seen in table 4. It is evident from this table that in this geographic area clinically diagnosed hepatitis is at a low during June and July with cases remaining rather constant from August to February and then reaching a high during March through May.

Discussion

The question can be raised "From where did the 2058 cases of infectious hepatitis occurring in the Memphis area come?" From the foregoing description of the epidemicity of this disease, it can be seen that infectious hepatitis can take three major forms: (a) an endemic form in which isolated cases occur throughout the city or county throughout the year, (b) an epidemic exhibiting a significant rise in number of cases in the community that may last a year or more and occurring in approximately 7 to 8 year cycles, and (c) an epidemic form characterized by clusters of cases traceable to a common source of infected food or contaminated water. This latter epidemic form is not apparent in the statistics presented above, but has been observed by us in this community from time-to-time as it has elsewhere.

A comparison of the Memphis area's experience can be made with the national and regional experience published by the National Communicable Diseases Center.[3] The case rate of reported viral hepatitis by quarter July 1952 to June 1967 for the United States as a whole substantiates that two major epidemics occurred with peaks in

Table 2

INFECTIOUS HEPATITIS 1955-1967 IN MEMPHIS-SHELBY COUNTY
BY AGE GROUP, RACE, AND SEX
Average Rates per 100,000

Age Group	White Males		White Females		Negro Males		Negro Females		Total	
	Cases	Rate*	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
0-4	24	8	17	6	25	11	18	8	84	8
5-9	95	35	110	42	53	27	32	16	290	31
10-14	91	38	93	40	36	23	26	17	246	32
15-19	62	28	52	28	40	38	24	21	178	28
20-29	108	31	110	29	75	51	66	34	359	34
30-39	69	18	62	15	43	28	35	18	209	18
40-49	57	18	44	13	17	12	16	9	134	14
50-59	29	13	19	8	10	8	7	5	65	9
60 +	30	13	29	9	10	7	5	3	74	9
Total	565	22	536	20	309	22	229	15	1639	20

*Rate per 100,000 based on 1960 census divided by 13.

Table 3

INFECTIOUS HEPATITIS 1955-1957 IN MEMPHIS-SHELBY COUNTY
BY YEAR AND AGE GROUP
Rate per 100,000

Year	AGE GROUP								
	0-4	5-9	10-14	15-19	20-29	30-39	40-49	50-59	60+
1955	4.5	26.7	17.5	2.4	4.7	15.7	7.3	2.0	1.8
1956	4.3	18.6	12.4	9.4	12.9	10.7	5.8	7.6	12.0
1957	9.7	27.2	27.3	9.1	11.8	10.6	5.7	1.9	9.9
1958	1.3	9.2	16.6	6.6	4.8	5.8	8.4	1.8	3.2
1959	13.0	24.8	19.3	12.9	15.6	6.9	6.9	5.3	1.6
1960	13.9	48.8	51.9	22.8	27.9	21.4	10.9	8.7	6.0
1961	23.5	116.7	115.2	76.5	81.9	35.6	17.5	15.3	4.4
1962	8.5	47.3	65.9	74.1	71.4	33.0	26.5	8.3	12.8
1963	4.8	21.1	17.6	25.0	35.3	9.8	9.2	9.8	11.1
1964	4.8	24.4	9.9	34.5	23.3	18.2	16.8	11.2	9.4
1965	2.4	16.3	16.3	11.7	32.2	20.1	14.0	7.9	9.4
1966	12.8	12.2	18.3	24.2	41.4	18.8	16.3	10.8	9.0
1967	2.3	14.3	8.8	21.9	59.8	23.7	31.0	16.6	15.0

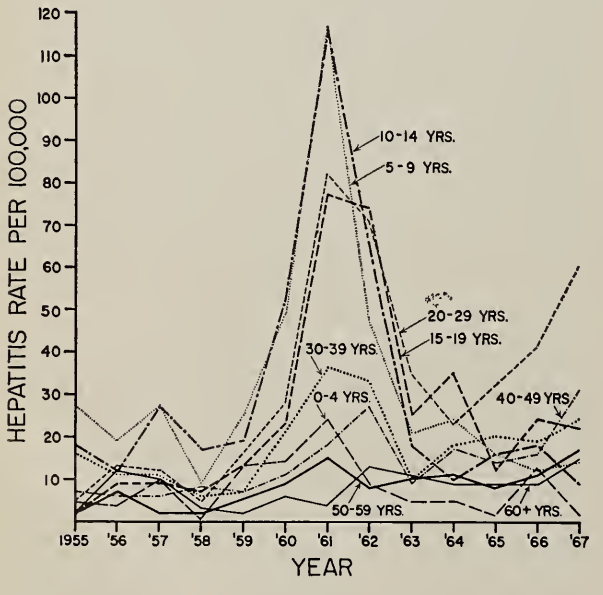


FIG. 2

1953-54 and 1960-62. Also substantiated on the national scale is the relatively higher endemic rate since the last outbreak.

Table 5 compares the infectious hepatitis rates for the epidemiologic years 1959-63 in the United States, the East South Central Division (Kentucky, Tennessee, Alabama, and Mississippi) and the Memphis area. In terms of the national statistics it would appear that the Memphis area outbreaks reach proportions greater than that of the Country as a whole, but not as great as the East South Central Division that had contributed substantially to the national figures.

The role of inapparent or nonicteric infectious hepatitis in the epidemiology of this disease is indeed intriguing. It is apparently now well recognized that the majority

Table 4

Monthly Distribution of Infectious Hepatitis Cases in Memphis-Shelby County 1955-1967

	Patients Under Age 30	*Patients' Age 30 and Over*	*Total*
January	94	48	142
February	103	40	143
March	114	51	165
April	100	41	141
May	112	47	159
June	65	38	103
July	75	32	107
August	103	38	141
September	108	40	148
October	99	37	136
November	88	36	124
December	96	34	130
Total	1157	482	1639

Table 5

Infectious Hepatitis Rate Comparisons for Epidemiologic Years 1959-1963
Rate per 100,000

Epidemiologic year	*United States*	*East So. Central States**	*Memphis-Shelby County*
July '59-June '60	17.1	35.4	30.8
July '60-June '61	35.8	80.3	37.0
July '61-June '62	33.8	71.0	51.7
July '62-June '63	24.4	37.6	33.0

*Kentucky, Tennessee, Alabama and Mississippi.

of young children with hepatitis have either a mild anicteric illness or totally subclinical disease. Also, with increasing age, the ratio of anicteric to icteric cases of hepatitis approaches unity.[4] Through the use of newly developed immunologic techniques for the detection of the Australian antigen and similar antigens we now should have a method whereby it may be possible to survey populations for the presence of the anicteric or subclinical disease.[5] The experiences in the Memphis area are interesting in that one can see a diminishing epidemicity in the 30 to 39 year age group through the 50 to 59 age group and a total lack of response to the epidemic in those 60 years and older. This may be indicative that the older population has derived immunity resulting perhaps from antibody formation due to inapparent infections acquired with aging.

The seasonal pattern of infectious hepatitis cases occurring in the Memphis area showed a distinct low in the summer months with highs in the later winter. Thus it would appear that the disease spread at a higher rate in the cooler months than in the warmer. This in fact may be true but it is possible that it is an artifact resulting from the long incubation period of the disease. There may actually be a higher rate of spread of the infection during the summer-fall months when most enteric infections seem to be at a peak, but in this case the long incubation period may tend to shift the clinical appearance of the disease toward the winter months.

As stated initially there is still much to be known about the epidemiology of infectious hepatitis. It is interesting to speculate that this is a disease with a changing pattern, perhaps the result of a change in the ecology of the disease. If this is so, what factor or factors are involved? One of the most interesting observations in the epidemiologic pattern of the disease in the Memphis area as well as on the national scale is a distinct change in the endemicity to a higher level of cases since the 1960-62 outbreak. This may be the result of the role of inapparent infection or possibly due to a shift of the frequency of the illness to the older age groups where icteric infection may manifest itself more commonly. One wonders what effect this high level of endemic disease will have upon the epidemic wave that is expected about 1969-70. Perhaps the coming epidemic will be a relatively minor one due to this high level of endemic disease establishing a high degree of immunity to the population as a whole. The next few years should give us an answer.

Summary

Infectious hepatitis occurring in Memphis-Shelby County Tennessee for the 1952-67 period is described and compared with national and regional experiences. A total of 2058 cases of infectious hepatitis were reported in the Memphis area during the 16 year period under study. Two major epidemics occurred, one in 1953-54 and another considerably larger outbreak between 1960-62. The 1960-62 outbreak was com-

prised chiefly of age groups 5 through 29 whereas the age group under 4 years and over 50 years contributed hardly at all to the outbreak. The endemic level of hepatitis occuring between epidemics has risen to an appreciably higher level since the 1960-62 outbreak over the level prior to this outbreak.

There appears to be no real differences in terms of race and sex distribution of the disease. Cases of infectious hepatitis occurred the year around but were most common in the late winter months. The ecologic pattern of infectious hepatitis as it occurred in the Memphis area is discussed in relation to current knowledge of this disease.

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From the Executive Director
. E. Ballentine

MEDICAL DIGEST

News of Interest to Doctors in Tennessee

BOARD OF TRUSTEES ACTIONS

TMA NOMINATING COMMITTEE APPOINTED FOR 1969 . . . The Board of Trustees at its first quarter meeting held in Nashville on January 11 and 12, acted in keeping with the TMA By-Laws requiring the Board to appoint a Nominating Committee from among the certified delegates and ex-officio delegates to the House. The Nominating Committee is composed of the following . . . EAST TENNESSEE: E. Kent Carter, M.D., Kingsport; John H. Burkhart, M.D., Knoxville; Harry A. Stone, M.D., Chattanooga . . . MIDDLE TENNESSEE: W. O. Vaughan, M.D., Nashville; Joseph L. Willoughby, M.D., Franklin; Charles A. Trahern, M.D., Clarksville . . . WEST TENNESSEE: C. D. Hawkes, M.D., Memphis; Byron O. Garner, M.D., Union City; Thomas K. Ballard, M.D., Jackson.

* * * * *

IMPORTANT ACTIONS . . . The Board also appointed the members of the Board of Directors of IMPACT; directors for the TMA Student Education Fund and considered recipients for the Distinguished Service Award to be presented at the annual meeting . . . Appointments were made to the Standing and Special Committees of the Tennessee Medical Association which will become effective following the annual meeting in April . . . The Board also received and evaluated reports from division coordinators on activities of committees of the Association during the fourth quarter of 1968 . . . Confirmed nominees submitted for the Advisory Committee on Medicaid, as presented to the Governor . . . Accepted a report from the Treasurer relative to TMA finances through the fourth quarter of 1968 . . . Appointed an ad hoc committee to study and consider changes in the medical licensing laws of Tennessee.

* * * * *

BOARD TO SUBMIT RESOLUTIONS TO HOUSE . . . The Trustees considered several resolutions to be presented to the House of Delegates. These included a resolution to recommend extra coverage in professional liability insurance . . . Resolution to encourage medical graduates to practice in Tennessee . . . A resolution urging county medical societies and hospital staffs to conduct one meeting each year on the subject of legal problems of medical care . . . Resolution on guideline principles re delivery of medical care services . . . A resolution for a change in the format of the sessions of the House of Delegates and a policy statement on guidelines for heart transplantation . . . Recommended the Legislative Committee of TMA to study an Anatomical Gift Act for possible introduction in the General Assembly.

* * * * *

GUIDELINES—EDUCATION . . . The Board also gave final approval to the guidelines for use by the Medicare fiscal intermediary relative to utilization of facilities . . . Gave final approval to a recommendation from TMA's Committee on Continuing Medical Education to proceed with an effective continuing education program in Tennessee . . . Gave final

approval to the Code of Cooperation between the Tennessee Medical Association and the Tennessee Bar Association.

* * * * *

OTHER BOARD ACTION . . . Included study and adoption of the 1968 annual audit of TMA's financial operations . . . Considered and acted upon a resolution submitted to the Board from the Tennessee Academy of General Practice re "Medicare payment scale for hospitals" . . . Made appointments to various study committees as requested by the Tennessee Mid-South Regional Medical Program . . . Approved an appointment for a representative on the Long Term Care Advisory Committee of the Tennessee Hospital Association . . . And designated two representatives from TMA to attend the Third National Conference on Socio Economics of Health Care.

* * * * *

TMA'S 1969 ANNUAL MEETING—HOUSING FOR THOSE ATTENDING . . . The Gatlinburg Chamber of Commerce Reservations Department will coordinate housing for those that make a request for hotel or motel reservations for the Annual Meeting, April 10-12. Every TMA member has been mailed a brochure and a reservation form for his hotel accommodations. Please make your reservations promptly.

* * * * *

HOUSE OF DELEGATES . . . The first session of the House of Delegates is scheduled for 1:00 P.M. on Thursday afternoon, April 10. The House will meet for its second session on Saturday afternoon, April 12 at 1:00 P.M. All sessions will be held in the Auditorium. Reference Committees will meet on Friday, April 11. Reference Committees will consider resolutions, amendments, reports and the business referred to them. Members of the House of Delegates and any other TMA member may appear before any Reference Committee for testimony. The Reference Committees will prepare reports and present them to the House on Saturday afternoon, April 12.

* * * * *

SPECIALTY SOCIETIES . . . And related organizations will hold sessions on all three days of the annual meeting, April 10-11-12. Fourteen specialty groups will participate.

* * * * *

SOCIAL EVENTS . . . The principal social event will be the President's social hour and Banquet on Friday evening, April 11 in the Gatlinburg Auditorium. The social hour begins at 6:00 P.M. The Banquet will begin at 7:00 P.M. A dance will follow the Banquet at the Riverside Motor Lodge . . . Mr. Shearin Elebash, a humorist and entertainer will be the principal entertainer following the Banquet and the various presentations.

* * * * *

HIGHLIGHTS OF THE 1969 TMA ANNUAL MEETING . . . Include interesting scientific programs presented on Friday and Saturday mornings. TMA will present two panels, one on Friday on the subject "Trauma" and a second on Saturday, presented by the Tennessee Obstetrical and Gynecological Society and the Tennessee Pediatric Society . . . Dr. Dwight Wilbur, President of the American Medical Association will speak on the subject, "Let's Lead Rather Than Be Led" at the general session on Friday morning, April 11. The President of the Oklahoma State Medical Association will speak on the subject of "Medicaid Experiences" . . . On Saturday morning, April 12, Mr. James Foristel, legislative representative in the AMA Washington office will speak on the subject "Current Federal Medical Legislation and Techniques of the AMA Washington Office" . . . **IMPACT** Banquet on Saturday evening, April 12 at the River Terrace.

Public Service Communications Legislation

Hadley Williams, Public Service Director

TRAVELERS INSURANCE COMPANY RAILROAD RETIREMENT INTERMEDIARY . . . Patients age 65 and over who are beneficiaries of the Railroad Retirement Act and have purchased Part "B" Medicare coverage have a different fiscal intermediary for payment of Medicare claims. The Travelers Insurance Company acts as intermediary for all Railroad Retirement claims, including Part "B" of Medicare. Physicians with patients covered under the program can speed Part "B" claim service by directing Request for Payment Forms to Travelers instead of Equitable. Travelers has claims paying offices in Memphis, Nashville, Chattanooga and Knoxville. Physicians should continue to forward claims to Equitable if any questions exist concerning the patient's eligibility. If the patient is covered under Railroad Retirement, the claim will be forwarded by Equitable to Travelers after the patient's status has been ascertained.

* * * * *

MID-SOUTH REGIONAL MEDICAL PROGRAM SETS GRANT APPLICATION DEADLINE . . . The Mid-South Regional Medical Program located in Nashville advises that March 1st is the deadline for receiving grant applications to be considered during the next review cycle. Any applications for grants received after March 1 will be held over until the next deadline period which will be July 1, 1969. Questions concerning the program should be directed to the Mid-South Regional Medical Program, 1100 Baker Building, 110-21st Avenue, South, Nashville, Tennessee 37203.

* * * * *

86TH TENNESSEE GENERAL ASSEMBLY ORGANIZES . . . The 86th Tennessee General Assembly met January 7, 1969 for the purpose of electing legislative officials and organizing the House and Senate. This was accomplished during a harrowing 10-day session marked by sometimes bitter partisan politics. For the first time in almost 100 years the Republican Party elected the Speaker of the House. Representative William L. Jenkins, a 34-year old Rogersville attorney won the post over the Democratic nominee, Representative Pat Lynch of Winchester. Frank C. Gorrell of Nashville won re-election as Speaker of the Senate as expected. Other elections saw newcomers Thomas G. Hull of Greene County elected as Chief Clerk of the House and Mrs. James R. Tuck of Davidson County elected as Chief Engrossing Clerk. John W. Cooke, Jr. of Davidson County was returned as Chief Clerk of the Senate and Fred Atchley of Sevier County, a former Republican House member was named Chief Engrossing Clerk of the Senate. Constitutional Officers elected were William R. Snodgrass of White County as Comptroller; Charles Worley of Sullivan County as Treasurer and Joe C. Carr of Davidson County as Secretary of State. All were incumbents. Both bodies adjourned until noon, February 25, 1969 to begin the regular legislative session.

VOLUNTEERS SOUGHT FOR TMA-THA CAPITOL FIRST AID STATION . . . A special call has been issued for volunteers to staff the Capitol First Aid Station co-sponsored by TMA and the Tennessee Hospital Association. The TMA "Transmitter" has been mailed to each member with a message from the chairman of the TMA Legislative and Public Policy Committee, Dr. O. Morse Kochtitzky of Nashville. Physicians are urged to read the communication and respond by volunteering for one day.

* * * * *

91ST CONGRESS CONVENES . . . The 91st Congress convened January 3, 1969 with the seating of 57 Democrats and 43 Republicans in the Senate and 243 Democrats and 192 Republicans in the House. A recent U.S. Chamber of Commerce publication points out that mere numbers don't tell the story of what to look for in the 91st Congress. The Chamber calls attention to the fact that a number of "liberal" members of Congress found out in November that their voting records weren't too palatable to the folks back home. This was particularly true of southern Democrats — especially those in positions of leadership. As ball-packers for the Johnson Administration's legislative program, some of them had racked up voting records which brought huzzahs from AFL-CIO's Committee on Political Education (COPE), but boos from the majority of their voting constituents. With a Republican Administration, these Congressmen will no longer be under the pressures of pushing a President's program. Thus, voting records among this particular group will tend to move toward the center. Another factor which will move some members of Congress away from out-and-out "liberal" stances is the mood of the electorate as expressed in the recent election. It was apparent that the average citizen wants some changes made in Washington.

* * * * *

TAX CREDIT BILL INTRODUCED FIRST DAY . . . Democratic Representative Richard Fulton of Tennessee's fifth congressional district introduced H.R. 19 known as the Health Insurance Benefits Act of 1969 as part of the first day's 2,379 bills. The bill authorizes a tax credit keyed to an individual's income equal to the amount of premiums he has paid for a medical care insurance program, to a maximum of $150 a year for an individual or $400 per year for a family unit. The bill provides that an individual with an income of less than $2500 or a family with an income of less than $5000 would get a tax credit of 100% of the cost of health insurance premiums. The tax credit is proportionately reduced as the individual or family income rises to where an individual's income exceeds $7500 or a family's income exceeds $10,000, at which time the tax credit would be 25% of medical insurance premiums. In the case of an individual who has an income of less than $2500 or a family with an income of less than $5000 who are not beneficiaries of a medical insurance program, the Secretary of Treasury would issue a medical care insurance premium certificate which could be used to purchase coverage. The AMA, at the December meeting in Miami, reaffirmed and adopted the concept of income tax credits to defray the cost of voluntary health insurance.

* * * * *

PARTNERSHIP FOR HEALTH CONFERENCE SET . . . The Nashville Area Chamber of Commerce and Fifth District Congressman Richard Fulton will co-sponsor a statewide invitational conference on comprehensive health planning at the Sheraton Motor Hotel in Nashville Thursday, February 27th. More than 1,000 physicians, nurses, and persons in various other health professions will be invited as well as urban and rural community civic leaders. The purpose of the conference is to educate and stimulate action on the part of community leaders to identify and attack community health needs through the mechanism of comprehensive health planning.

President's Page

MEDICAL SOCIETY UNITY



Dr. Newell

If the Tennessee Medical Association is to achieve maximum development of its programs and play a major role in directing changes in health care to meet the present day problems of the public, then it must have enlightening and active participation of all its members. I feel strongly that our TMA holds a most important and unique position in the life of the physicians of Tennessee. Why is our state organization any different from many other medical organizations—local, state and national? The answer, I feel, is that we must have one organization which can speak for all doctors. It is important that we represent doctors in education and research as well as private practice, if we are to prevent the taint of unionism. In education we are maintaining our standards by the many fine medical school programs, scientific journals, closed T.V. forums as well as our general practice and specialty board societies and meetings.

Today one of the primary objectives of the TMA must be to provide leadership and direction in the many socio-economic changes which are occurring in the practice of medicine. In order to accomplish this, our organization must be democratic and speak for the large majority of the physicians of the state. It must be strong enough to enforce medical ethics rather than have state and federal governments make the rules and guidelines. Finally, the physicians must be sufficiently interested and educated in the health care problems of our times to influence the business, labor, and state officials who are responsible for enacting new taxes as well as new laws and regulations pertaining to health care.

Medical society unity at the local county level is the basis of medicine's strength. Most physicians tend to divert their time to the educational benefits of their specialty societies, to the many administrative and other hospital staff responsibilities, and neglect their county medical society. This is also true of doctors in education and research. Yet we should have *one* society to speak for all doctors if we are to have strength enough to face up to Big Government and Big Welfare.

For this reason, the strength of our local medical societies and the active participation of its members will depend on how well the T.M.A. functions. The T.M.A. is what its members make it!

Sincerely,

Edward T. Newell Jr.

President

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FEBRUARY, 1969

EDITORIAL

MOTIVATION TOWARD CONTINUING EDUCATION

In December 1968, this page informed the TMA membership that a Committee on Continuing Education of the *Association* has been appointed. It reviewed some of the historical background of continuing education in this country and called attention to the accelerating interest in activating a program of self education. The editorial also told of a conference held recently by the AMA for representatives from each state association either to learn what individual state organizations are doing in this effort or to stimulate activity where none existed.

Comment was made that motivation toward continued education might be explored at a future date. It seems this is a fit topic for consideration at the moment. The force of motivation to improve oneself may come from one of several origins.

(1) The majority of people are evaluating their performance almost continuously. The doctor, in essence, though he may be unaware of it, is continually asking himself "how he is doing":—did he made the correct diagnosis; did he overlook an important detail in the history or examination; did he request the key laboratory or other studies; did he prescribe correctly or proceed with a surgical procedure properly? The Joint Study Committee on Continuing Education gave much thought to this aspect of motivation, debated it at length, and in its report by Dryer,[1] in 1962—*Lifetime Learning for Physicians*—(referred to in December) committed itself to the belief that most physicians have an intrinsic desire for self betterment, and that "learning is essentially an individual, personal achievement." This was in contrast to the common belief that only 10 per cent or so of doctors attend courses for continuing education—that they are "repeaters" and the ones who do not need it. (If true there may be cogent reasons for this state of affairs which may be considered at another time.) The fact that 10,000 internists paid $10.00 (for members) or $25.00 (for non-members) to subject themselves to answering 700 questions in 9 separate clinical fields in the *Self-Assessment Examination* of the American College of Physicians gives the lie (at least for that segment of doctors) to any cynic who denies an inherent desire of a professional man to attain excellence if possible.

(2) Motivation may be stimulated by desire to receive approbation of one's peers. This may show itself in one who tends toward mental laziness, but takes an active part in the self education activities of a hospital staff or group to avoid the appearance of being laggard. This may contain an element of coercion (by his peers) as the need to fulfill requirements for membership in the American Academy of General Practice, for example. (It was mentioned in the December editorial that the Oregon Medical Association has embarked upon a pilot program to require similarly evidence of continued education to maintain membership in the Association. The California Medical Association is exploring the possibility of making such education mandatory for continued hospital staff appointments, see page 153).

(3) Motivation may be the result of out-

right coercion—the poorest and most unsatisfactory form of motivation as brought out in the Dryer Report. Yet it is the possible coercion in the threat of some move toward relicensure or recertification which lends an impetus to the current flurry of activity in the field of continuing education. The laity and government increasingly are questioning whether the medical profession remains abreast of the times and how such a fact can be established. The following quotation from the Report of the National Advisory Commission on Health Manpower (November, 1967) deserves careful reading.[2] Under the heading of "closing the quality gap" and continuing education one reads:

"However, simply making educational opportunities available will not assure their utilization by busy physicians unless sufficient incentives are provided to them.

"One way of providing such incentives would be to relicense health professionals periodically on the basis of acceptable performance in programs of continuing education, or on the basis of challenge examinations for those who choose not to participate formally in continuing education. Both the educational programs and the challenge examinations should be directed to the practitioner's specialty, and not to the broad field of medical science as is done by initial licensure. Above all, the emphasis in such programs should not be punitive. Their primary purpose should be to make easily available to the practitioner the new knowledge which he now stuggles to obtain."

Following a discussion of difficulties involved in relicensure, the Commission continues:

"Similar obstacles accompany any change, and we do not regard them as reasons for not undertaking it. The dual program of continuing education and relicensure is a feasible method for providing the health professional with the new knowledge he needs and, at the same time, giving assurance to the public that a practitioner's knowledge reflects the most advanced results of medical progress. Health professionals are already licensed; and excellent, workable procedures, tested by long practice, exist for basing this governmental regulation on professional judgment. There is no reason why subsequent relicensure should be any less professional in its orientation, or should offer any greater possibilities for abuse. We therefore recommend that *professional societies and state governments should explore the possibility of periodic relicensing of physicians and other health professionals. Relicensure should be granted either upon certification of acceptable performance in continuing education programs or upon the basis of challenge examinations in the practitioner's specialty.*"

It is the last sentence which has lent a sense of urgency to the desire of those in the AMA and state associations to activate programs in continuing education, and to develop means of evaluating them so the doctor's peers may vouch for his competence for recertification and avoiding relicensure (The AMA has indicated its willingness to act as certifying to continuing education if the state association prefers not to do so). For those who will say the AMA acts only under a threat by government to invade the practice of medicine, I hasten to remind of the many occasions it has taken steps to better continuing education. In 1907, 1913, 1919, 1925, 1942 and 1955 it suggested or moved on items in this area. The Vollan Report of the Council on Medical Education and Hospitals (1951) stated the "Objectives and Basic Principles of Postgraduate Medical Education." In 1961 the Council established an Advisory Committee which is evaluating and accrediting courses in continuing education. That same year the AMA and the Association of American Medical Colleges made the major financial contribution to support the Joint Study Committee on Continuing Education and subsequently began a program to underwrite "A University Without Walls."

Governmental coercion is possible. Twelve states require evidence of continuing education in annual recertification of osteopathic physicians. New York State links the payment of doctors for *Medicaid* to evidence that he has taken part in continued education unless he is a member of the American Academy of General Practice or eligible for Board certification.

Incidentally, as an item of "round-about" coercion, a Massachusetts higher court has ruled as invalid the long-standing custom that a doctor should be judged by the practices in his community. Now the yardstick in that State presumably will be the competency of the urban specialist.

These thoughts on motivation are of interest to the TMA Committee on Continuing Education as it moves forward in its functions.

Again your editor would recommend a re-

view of the reprint under *The Viewing Box* in December 1968, (page 1241).

R.H.K.

References

1. Dryer, Bernard V.: Lifetime Learning for Physicians: Principles, Practices, Proposals, J. Med. Educ. 37: (Part 2) 1, 1962.

2. Report of the National Advisory Commission on Health Manpower, Vol. 1, November 1967. Washington. U. S. Government Printing Office.

IN MEMORIAM

Johnson, J. Paul, Chattanooga. Died January 2, 1969, Age 74. Graduate of Vanderbilt University School of Medicine, 1923. Member of Chattanooga-Hamilton County Medical Society.

Bowman, Medford C., Knoxville. Died January 2, 1969, Age 53. Graduate of University of Louisville School of Medicine, 1939. Member of Knoxville Academy of Medicine.

Raines, Nathaniel H., Springfield. Died December 30, 1968, Age 74. Graduate of Meharry Medical College, 1921. Member of Robertson County Medical Society.

Long, Harold Douglas, Chattanooga. Died December 11, 1968, Age 70. Graduate of Vanderbilt University School of Medicine, 1923. Member of Chattanooga-Hamilton County Medical Society.

Wallace, James P., Daisy. Died December 24, 1968, Age 54. Graduate of University of Pennsylvania School of Medicine, 1938. Member of Chattanooga-Hamilton County Medical Society.

Thomas, Charles Roberts, Chattanooga. Died December 20, 1968, Age 77. Graduate of University of Maryland School of Medicine, 1917. Member of Chattanooga-Hamilton County Medical Society.

Rochelle, William Paul, Memphis. Died January 6, 1969, Age 63. Graduate of University of Tennessee College of Medicine, 1939. Member of Memphis-Shelby County Medical Society.

PROGRAMS AND NEWS OF MEDICAL SOCIETIES



New Members

The Journal takes the opportunity to welcome these new Tennessee Medical Association members.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY
Thomas E. Taylor, M.D., Chattanooga

COCKE COUNTY MEDICAL SOCIETY
Jerry Crook, M.D., Newport
Haller Henderson, M.D., Newport
David McConnell, M.D., Newport

FRANKLIN COUNTY MEDICAL SOCIETY
E. W. Kirby-Smith, M.D., Sewanee

HAMBLEN COUNTY MEDICAL SOCIETY
C. C. Blake, M.D., Morristown

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY
Winfred L. Wiser, M.D., Memphis
John T. Vookles, M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE
Aly Fahmy, M.D., Nashville
Alan L. Graber, M.D., Nashville
Erich B. Groos, M.D., Nashville
David T. Karzon, M.D., Nashville

SCOTT COUNTY MEDICAL SOCIETY
Jerry W. Moye, M.D., Oneida

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL SOCIETY
George L. Echols, Jr., M.D., Johnson City

Nashville Academy of Medicine

Dr. Louis Rosenfeld was installed as 1969 president of the Nashville Academy of Medicine at its annual banquet January 15. In his inaugural address he cited physicians' participation in civic activities, and urged more community involvement by members.

Also taking office were: Dr. Luthur Beazley, Board chairman; Dr. Robert Chalfant, president-elect; Dr. Russell Birmingham, secretary-treasurer; and Drs. Charles Hamilton and Edwin Williams, new Board members.

TMA 50-year pin awards to Drs. George Carpenter, Sr., Berry T. Rucks, N. S. Shofner, and John B. Youmans were announced. A memorial observance was conducted for six members who died during 1968.

Knoxville Academy of Medicine

Dr. Edward T. Newell, Jr., president of the Tennessee Medical Association, was guest speaker at the meeting of the Knoxville Academy of Medicine on January 14th. The first meeting of the year was held in the new auditorium of the Academy building.

Chattanooga-Hamilton County Medical Society

The Society's annual banquet and installation of officers was held at the Read House on January 7th. Dr. David P. McCallie assumed the presidency, succeeding Dr. Harry A. Stone. Dr. Robert G. Demos was named president-elect and Dr. Durwood L. Kirk will serve as Secretary in 1969.

The Social Hour and Dinner were sponsored by the Physicians Business Bureau.

TMA Nominating Committee

A nine-man nominating committee to select a slate of officers for the Tennessee Medical Association for 1969 was selected by the Association's Board of Trustees on January 11th. The Nominating Committee will hold its first meeting at the TMA Annual Meeting in Gatlinburg on Thursday, April 10th. At that time a Chairman will be elected. Members of the Committee are: EAST TENNESSEE: Dr. E. Kent Carter, Kingsport; Dr. John H. Burkhart, Knoxville; and Dr. Harry A. Stone, Chattanooga. MIDDLE TENNESSEE: Dr. W. O. Vaughan, Nashville; Dr. Charles A. Trahern, Clarksville; and Dr. Joseph L. Willoughby, Franklin. WEST TENNESSEE: Dr. C. D. Hawkes, Memphis; Dr. Byron O. Garner, Union City; and Dr. Thomas K. Ballard, Jackson.

NATIONAL NEWS

The Month in Washington

(From Washington Office, AMA)

A House Ways and Means Committee member introduced on the first day of the new Congress a bill that would provide federal income tax credits to help individuals buy private health insurance. The legislation (HR19), sponsored by Rep. Richard Fulton (D., Tenn.), was similar in principle to a health insurance financing plan utilizing tax credits approved by the American Medical Association House of Delegates at San Francisco last June and reaffirmed at Miami Beach last December.

Fulton said he considered his bill "at least an opener" for hearings. "Certainly before expanding any federal program, I believe it worthwhile to explore the use of the private sector and our tax system," Fulton said.

The Fulton bill provides that individuals with incomes of $2,500 or less and families with incomes of $5,000 or less would receive $150 vouchers from the federal government per eligible individual for the purchase of health insurance. The family maximum would be $400.

In the case of a taxpayer with an income between $2,500.01 and $5,000, or a family with an income between $5,000.01 and $7,500, the credit would be a 75 percent per eligible individual with a maximum of $400 per family.

In the case of a taxpayer with an income of $5,000.01 to $7,500, or a family with an income between $7,500.01 and $10,000, the credit would be 50 percent per eligible individual with a $400 family maximum.

In the case of a taxpayer with an income exceeding $7,500.01, or a family with an income exceeding $10,000.01, the credit would be 25 percent.

At San Francisco, the House of Delegates adopted as approved AMA policy "the principle of graduated income tax credits for premiums paid for adequate health insurance". A resolution adopted at Miami Beach called upon the AMA to "vigorously promote the enactment of federal legislation implementing" the plan.

★

A special commission on health facilities concluded that government and private enterprise must cooperate to organize the nation's health resources into effective, efficient and economical community systems of comprehensive health care for all persons.

The National Advisory Commission on Health Facilities, established in October, 1967, drafted its report to the President in general terms and did not make any recommendations for legislation.

James Z. Appel, M.D., a former president of the American Medical Association and a commission member, said the family physician would be the ideal "point of entry" to a community health system but there are

not enough of them. A summary of the report included:

"America's health care systems should combine private and public responsibility. Facilities and systems will vary from community to community in accordance with local capacities and local needs, but guiding principles should govern the effort to develop effective and efficient health care systems: "1. These systems should be organized to assure appropriate points of entry into and continuity of health care services. 2. Every citizen should have ready access to quality health care. 3. States, regions, local communities, and all health institutions should carry out continuous planning. 4. Both those who provide and consume health services should participate in the decisions. 5. All levels of health care should be interdependent."

★

A Health, Education and Welfare Department report to Congress recommended that preventive health care services not be added to medicare benefits at this time. The report cited as reasons for the negative recommendation: administrative constraints, inability to estimate costs, limited experience with automated multi-phasic health screening, and an inadequate supply of health professionals.

The report was one of three requested by Congress last year and submitted before the change in Administration.

A second report dealt with coverage of mentally ill under medicare but did not include any recommendations.

The third reviewed qualifications of personnel under current medicare regulations. It stated that, because of an acute manpower shortage in the field, physical therapists should be considered qualified if they could establish an adequate level of competency. HEW is developing a proficiency examination.

HEW recommended against allowing licensed practical nurses to serve as nurses responsible for the total nursing care at an extended care facility. It also recommended against changes in the regulations that set minimal standards for independent laboratory personnel.

The premium rate for medicare supplementary insurance covering physicians' fees (plan B) will remain at the present rate, $4 each for the individual beneficiary and the federal government, until July 1, 1970.

The Johnson Administration's Secretary of Health, Education and Welfare, Wilbur J. Cohen, decided against an increase although the Social Security Administration's chief actuary had advised that an anticipated rise in physicians' fees called for an increase of 40 cents each for the beneficiary and the government.

Cohen again asked physicians to show "unusual restraint" in setting fees. He urged that physicians and patients cooperate "in eliminating unnecessary utilization of physicians services", and asked carriers and intermediaries to carefully review claims during the next 18 months.

MEDICAL NEWS IN TENNESSEE

Hospitals Elect New Chiefs of Staff

The medical staff of Clarksville Memorial Hospital has elected Dr. J. E. Hampton as president of the staff. Dr. F. G. McCampbell was named chief of obstetrics and gynecology; Dr. R. W. Young, chief of surgery; Dr. J. F. Bellenger, chief of medicine, and Dr. T. K. Hepler was elected member at large.

★

Dr. Paul Drenning, Memphis, internal medicine, is the new president of St. Joseph Hospital's medical staff, succeeding Dr. John B. Dorian, general practitioner. Dr. Peter Wallace, neurosurgeon, was named president-elect. Dr. Thomas Currey, ophthalmologist is the new secretary and a chief of staff will be named at a later date.

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Dr. Raphael N. Paul, pediatrician and pediatric cardiologist, was elected chief of staff of Le Bonheur Children's Hospital, succeeding Dr. George S. Lovejoy. Other new officers are Dr. Albert Jones, vice president; Dr. Emmett Bell, secretary; Dr. Wil-

liam Threlkeld, chief of medicine, and Dr. Earle L. Wrenn, Jr., chief of surgery.

★

Dr. Bruce E. Galbraith and Dr. Howard A. Farrar have been elected chiefs of the medical staff at Harton Hospital, Tullahoma, and Coffee County Hospital, Manchester. They succeed Dr. Claude Snoddy and Dr. Clarence H. Farrar. Other medical staff officers at Harton Hospital are Dr. Charles B. Harvey, vice chief of staff and Dr. Earl E. Roles, Secretary. Also elected by the medical staff at Coffee County Hospital were Dr. John Shields, vice chief of staff and Dr. Clarence H. Farrar, secretary.

Tennessee Advisory Committee on Emergency Medical Services

Dr. James C. Prose, Knoxville, has been designated chairman of the Tennessee Advisory Committee on Emergency Medical Services, which is directing a statewide study of emergency health care. The study, financed by a U. S. Department of Transportation grant under the Highway Safety Act of 1966, is being conducted by a survey team of the University of Tennessee.

The Advisory Committee, appointed by Governor Ellington, will recommend to the State of Tennessee methods of upgrading all aspects of emergency medical services—including hospitals, physicians' services, communications, industrial facilities, ambulance services and related law enforcement. It is composed of physicians, ambulance service representatives, hospital administrators and government representatives. Physician members are Drs. Edmund W. Benz, Nashville; C. Robert Clark, Chattanooga; Byron O. Garner, Union City; and Moore Moore, Jr., Memphis.

University of Tennessee College of Medicine

Dr. Andrew D. Holt, President, presented degrees to approximately 119 students at the fall commencement exercises December 15th in Municipal Auditorium. There were 80 candidates for the M.D., 30 for the D.D.S., two for the Ph.D. and two for the M.S. degree. Four received certificates in physical therapy and one in radiologic technology. Dr. Arthur C. Guyton, chairman and professor of the Department of Physiology and Biophysics at the University of Mississippi School of Medicine, delivered the commencement address, entitled "Philosophical Implications of the Role of Medically Trained People in the Future of Mankind".

★

Dr. Albert W. Biggs has been named chairman of the Department of Urology, University of Tennessee Medical Units. Dr. Biggs has been acting chief since the retirement a year ago of Dr. Samuel L. Raines. Dr. Biggs, a past president of the Memphis branch of the Southeastern Section, American Urological Association, is known for his work in the field of urological surgery. Among other society memberships he is a diplomate of the American Board of Urology.

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Dr. Dean F. Davies, professor of preventive medicine, UT Medical Units, has been named president-elect of a new society formed at the November meeting of the American Public Health Association in Detroit. The Society for Advanced Medical Systems is to advance the use of preventive and predictive medicine through multiphasic screening by modern automated methods. Dr. Davies, also associate professor of medicine at UT, joined the faculty in 1966 from Columbia Presbyterian Medical Center in New York.

★

Dr. Henry Packer, chairman and professor of preventive medicine, University of Tennessee Medical Units, was elected vice-president for public health of the American College of Preventive Medicine at their recent meeting in Detroit.

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Participating faculty—Dr. L. W. Diggs, professor of hematology, presented the public address at the International Conference on Sickle Cell Disease, Kingston, Jamaica, January 8-10. In addition to his lecture on crises in sickle cell disease, Dr. Diggs presented a discussion of his studies with Dr. Luis Barreras, instructor in hematology, on pulmonary embolism in sickle cell disease.

Dr. Julio H. Garcia, associate professor of

neuropathology, presented two papers before the annual meeting of the Colombia Society of Pathologists held recently in Medellin, Colombia.

Grants—The UT Materials Science Toxicology Laboratory at the Medical Units has received a $25,000 grant from the National Institute of Dental Health for research in developing procedures for the toxicity evaluation of new dental materials and products. It is under the direction of Dr. John Autian, recognized for his research in materials, especially plastics for medical application . . . Dr. G. D. Ledney, assistant professor of radiology, has been awarded an American Cancer Society research grant of $60,000 for two years to fund research on secondary disease in mice after anti-lymphocity serum treatment . . . Dr. Cyrus C. Erickson, professor and acting chairman of the Department of Pathology, has received an American Cancer Society grant of $30,000 to support and encourage cancer research, especially among younger investigators in pilot projects . . . The Memorial Research Center and Hospital, Knoxville, has been awarded a $5,000 grant from Eaton Laboratories, the funds to be used to equip a new specialized hematology laboratory.

Director Named for Memphis Psychiatric Hospital

Dr. Dwight L. Crane, assistant professor of psychology at Memphis State University, has been named director of clinical psychology at Tennessee Psychiatric Hospital and Institute in Memphis. Dr. Nat Winston, Jr., Commissioner of Mental Health, announced that Dr. Crane will also be involved in supervision of work done at the hospital by advanced graduate students in psychology at MSU.

Vanderbilt University School of Medicine

A grant from the John A. Hartford Foundation, Inc., provides for genetic, biochemical and clinical research in congenital nonspherocytic hemolytic anemias. Under this grant there will be developed, under the direction of Dr. J. Van Eys of the Departments of Biochemistry and Pediatrics, in addition to active laboratory research in the mechanism of hemolysis in these disorders, the following resources: First a laboratory where red cell enzymes can be assayed on a routine basis, so that accurate diagnosis of these hereditary anemias can be made in this geographic area. Secondly, a clinic will be instituted for the continued care of patients with hereditary disorders of red cell metabolism both as a facility for continued care but also as a medium for genetic counseling and case finding so that relatives at high risk can be monitored and early diagnosis can be made in infants. It is especially important to have early case finding since in many instances it is the newborn who is at highest risk. The enzyme assays will be performed free of charge and physicians are invited to utilize this regional resource as a consultation facility.

★

The Guy Maness Visiting Professorship in Otolaryngology has been established. The first to fill this professorship was Dr. Paul Holinger, Professor of Bronchoesophagology at the University of Illinois College of Medicine, Chicago. This was the field in which Dr. Maness contributed much in his early days in Nashville and was an appropriate topic for presentation. Dr. Maness joined the Vanderbilt faculty in 1929 and founded the Division of Otolaryngology, at the medical school, lending stature to this specialty and becoming a teacher of repute and one to whom all colleagues, whether within the specialty or without, turned as consultant and whose opinions were highly valued. All who know him recognize his astute clinical observations and it is a happy circumstance that the professorship should be established within his lifetime, so he may savor such recognition.

PERSONAL NEWS

Dr. James D. Myers, Knoxville obstetrician and gynecologist who shouldered the burden of helping local youngsters into the world of competitive swimming, has been named recipient of the annual Service to Mankind Award from the Knoxville Sertoma Club.

The following Tennessee physicians were

appointed/reappointed to Councils and Committees of the AMA Board of Trustees in December: **Dr. Allan D. Bass,** Nashville, reappointed to Council on Drugs; **Dr. A. Roy Tyrer, Jr.,** Memphis, reappointed to Council on Voluntary Health Agencies; **Dr. Bland W. Cannon,** Memphis, reappointed to Committee on Continuing Medical Education, representing Council on Medical Education; **Dr. G. Baker Hubbard,** Jackson, reappointed to Committee on Planning and Development; **Dr. Charles C. Smeltzer,** Knoxville, reappointed to Liaison Committee to American Bar Association. **Dr. Wm. J. Darby,** Nashville, was recommended for reappointment as Chairman of the Council on Foods and Nutrition.

Dr. Walter L. Diveley has been named president of the Nashville Surgical Society, succeeding **Dr. William Hillman. Dr. Edmund W. Benz** was named president-elect, and **Dr. J. L. Farringer, Jr.,** secretary-treasurer.

Open house for **Dr. L. E. Coolidge** was held at the Takoma Medical Building, Greeneville, on December 17th. Dr. Coolidge has practiced medicine and surgery in Greeneville for 43 years. He is founder of Takoma Hospital and has served as its medical director and chief of staff.

Dr. A. Julian Ahler has returned to Harriman for the practice of radiology following a three-year residency training program at Baroness Erlanger Hospital, Chattanooga.

Dr. Robert E. Maddox, Kingsport, has been named president of East Tennessee Radiological Society. **Dr. William E. Nelson,** Knoxville, was named president-elect; **Dr. Cecil H. Kimball,** Cleveland, vice-president; and **Dr. E. F. Besemann,** Chattanooga, secretary-treasurer.

Dr. Richard H. Walker, medical director of the blood bank and transfusion service of John Gaston Hospital, received the Murray Thelin Humanitarian Award from the Memphis Chapter of the National Hemophilia Foundation. Dr. Walker helped establish the city blood bank and arranged for equipment to be available to hemophiliacs, who are deficient in a blood-clotting factor.

President Johnson appointed **Dr. Lloyd C. Elam,** president of Meharry Medical College, Nashville, to two national health committees. Dr. Elam will serve on the National Health Resources Advisory Committee and the National Advisory Committee on Selection of Physicians, Dentists and Allied Specialists.

Dr. Carroll H. Long, Johnson City, has been named to membership in the United Methodist "Hall of Fame in Philanthropy". Dr. Long was inducted into the Hall of Fame, January 15th during the annual convention of the National Association of Methodist Hospitals and Homes in New Orleans.

Dr. S. Benjamin Fowler, Nashville, became President of the American Academy of Orthopaedic Surgeons on January 22, at its Annual Meeting in New York. He succeeded Dr. Charles H. Herndon of Cleveland, Ohio.

Dr. Erich B. Groos, Nashville, announced the opening of his office for the practice of obstetrics and gynecology.

ANNOUNCEMENTS

Calendar of Meetings, 1969

State

April 10-12	Tennessee Medical Association Annual Meeting, Civic Auditorium, Gatlinburg
May 15	Middle Tennessee Medical Association, Springfield Country Club, Springfield
May 21-23	Mid-South Medical Association (Formerly Mid-South Postgraduate Medical Assembly), Memphis

National

March 7-13	American Association of Pathologists and Bacteriologists, San Francisco Hilton, San Francisco
March 10-13	New Orleans Graduate Medical Assembly, Roosevelt Hotel, New Orleans
March 15-19	American Academy of Allergy, Americana, Bal Harbour, Fla.
March 23-24	American Laryngological Association, Roosevelt Hotel, New Orleans
March 25-27	American Laryngological, Rhinological and Otological Society, Roosevelt Hotel, New Orleans
March 27-29	Southern Society of Anesthesiologists, Marriott Motor Hotel Atlanta, Ga.
March 28-29	American Otological Society, Roosevelt Hotel, New Orleans
March 31-April 2	American Association for Thoracic Surgery, Fairmont Hotel, San Francisco
April 13-17	American Association of Neurological Surgeons, Sheraton Cleveland Hotel, Cleveland
April 17-22	American Dermatological Association, Marriott's Camelback Inn, Scottsdale, Arizona
April 18-20	American Society of Internal Medicine, Palmer House, Chicago
April 20-25	American College of Physicians, Conrad Hilton, Chicago
April 21-23	American Academy of Pediatrics, (Boston Children's Hospital Centennial), Boston
April 28-May 1	Southeastern Surgical Congress, 37th Annual Assembly, Roosevelt Hotel, New Orleans.
May 3	American College of Psychiatrists, Bal Harbour, Florida

May 5-7	American Gynecological Society, Royal Orleans Hotel, New Orleans
May 5-9	American Psychiatric Association, Americana Hotel, Miami Beach, Florida
May 6-7	Association of American Physicians, Haddon Hall, Atlantic City, N. J.
May 7-9	American Association of Genitourinary Surgeons, Del Monte Lodge, Pebble Beach, Calif.
May 12-14	American Society for Gastrointestinal Endoscopy, Shoreham Hotel, Washington, D.C.
May 12-15	American Urological Association, Hilton Hotel, San Francisco.

Directory of Services to the Retarded State of Tennessee

A directory of services to retardates has been prepared by the Commission on Youth Guidance assisted by the Department of Mental Health and in cooperation with other state agencies and departments. The purpose of the directory is to provide families of retardates, professionals, organizations and others interested in retardation with a quick reference handbook for locating possible services for the retardates and their families in Tennessee. Since it is designed for families and lay persons and groups, as well as for professionals, basic procedures for obtaining services are included.

The directory may be obtained by writing to the Library, Department of Mental Health, State of Tennessee, 300 Cordell Hull Building, Nashville, Tennessee, 37219. Telephone: 741-2933.

1969 Rorer Awards Contest of The American College of Gastroenterology

The American College of Gastroenterology, in cooperation with William H. Rorer, Inc., of Fort Washington, Pa., takes pleasure in announcing the 1969 Rorer Awards Contest for the best papers in gastroenterology. There will be two classes of awards:

(1) For the best unpublished papers in gastroenterology or an allied subject. All papers submitted must represent original work in gastroenterology, or an allied subject and must not have been previously presented at meetings of any National Society. The contents of the papers may be clinical or basic science. Clinical papers must not be case records, but controlled clinical work. The length of a paper is no criterion for originality or value. All entries must be typewritten in English, double-spaced on one side of the paper, and submitted in six copies.

The winning entry will be selected by the Research and Education Committee of the American College of Gastroenterology and the awards will be made at the Annual Convention Banquet of the College, to be held in Houston, Texas in October, 1969. All papers selected for awards become the property of the American College of Gastroenterology, and the decision of the judges will be final. Should none of the papers submitted meet the standards set by the Committee, the Committee reserves the right to withhold the making of any award. The recipients of the first and second prize will be given the opportunity of presenting their papers in person at the annual meeting of the College in October. All entries must be received no later than June 15, 1969 and should be addressed to the Research and Education Committee, American College of Gastroenterology, 299 Broadway, New York, N. Y., 10007.

(2) For the best paper published in the American Journal of Gastroenterology. Three prizes, (first, second, third), are to be awarded for the best papers published in THE JOURNAL OF GASTROENTEROLOGY during the twelve months ending June 30, 1969, for which no previous prize has been awarded. The papers in this category will be selected by the Editorial and Publication Committee in cooperation with the Committee on Research and Education.

Annual NSPB Conference

The annual conference of the National Society for the Prevention of Blindness, Inc. will be held May 14-16 at the Pfister Hotel in Milwaukee, Wisconsin.

Papers, panel discussions and seminars on the latest developments in detecting and combating potentially-blinding eye disease, community-action eye health programs, and programs for industrial and school eye safety.

Congenital Nonspherocytic Hemolytic Anemias

Enzyme assays and consultation is offered free of charge under a grant from the John A. Hartford Foundation. Enquiries may be directed to Dr. J. Van Eys, Departments of Biochemistry and Pediatrics, Vanderbilt University School of Medicine, Nashville, Tennessee, 37203. Telephone—area code 615, 254-5411.

Cancer Genetics

The Medical Genetics Section of the Department of Preventive Medicine and Public Health at Creighton University School of Medicine, Omaha, Nebraska, is interested in the study of patients showing an increased incidence of any histologic variety of cancer in their families. Of particular interest to us is the cancer family syndrome, characterized by: 1) increased frequency of adenocarcinoma of all sites, particularly of the colon and endometrium, 2) early age at onset of cancer, 3) increased occurrences of multiple primary malig-

nant neoplasms, and 4) autosomal dominant inheritance. To date, we have investigated six families fulfilling all of the above criteria, and have corresponded with physicians in Europe who have described two separate and nonrelated families which also fulfill the above criteria.

Physicians with patients known to have a familial cancer background, may write to Henry T. Lynch, M.D., Associate Professor and Chairman, Department of Preventive Medicine and Public Health, Creighton University School of Medicine, 657 North 27th Street, Omaha, Nebraska 68131.

We invite your cooperation in our studies which will include a genealogical and medical investigation of the entire kindred in each case. All information obtained will be shared with family physicians in order to facilitate cancer control.

Middle Tennessee Heart Association and Tennessee Department of Public Health

Cardiac Day at Baptist Hospital Auditorium on March 13 will feature as guest speakers, Dr. Paul Dudley White and Dr. Leonard Scherlis.

* * *

HOSPITAL STAFFS ADOPT CMA PROPOSAL FOR REAPPOINTMENT

Forty hospitals throughout the state are taking the lead in adopting a recommendation of the California Medical Association that staff members list annually their continuing medical education activities as a condition for reappointment.

Staffs reported this change in response to letters sent in mid-July to hospital chiefs of staff by the CMA Committee on Continuing Medical Education and the Medical Staff Survey Committee recommending the new procedure.

Leaders in Medicine

"Many leaders in medicine believe this procedure will demonstrate to all the sincere interest of physicians in continuing medical education," Bert L. Halter, M.D., and Donald W. Petit, M.D., said in the letter recommending the new program. "This voluntary effort is a logical extension of the philosophy of our profession, and proof that outside regulation or laws are not necessary."

Letters were mailed to approximately 500 hospitals. Many requests have been received for CMA representatives to visit staffs and explain the recommendation.

List Activities

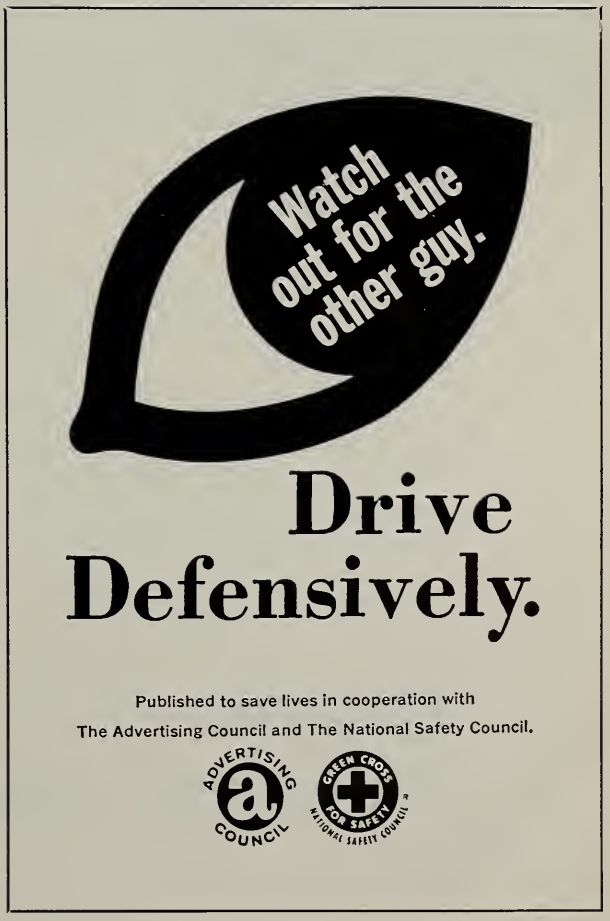
In the proposed program, listings would be used only for information by hospital medical staffs. Activities include attendance at local, regional or national scientific meetings, postgraduate courses, journal clubs, television conferences, grand rounds or other organized continuing education programs.

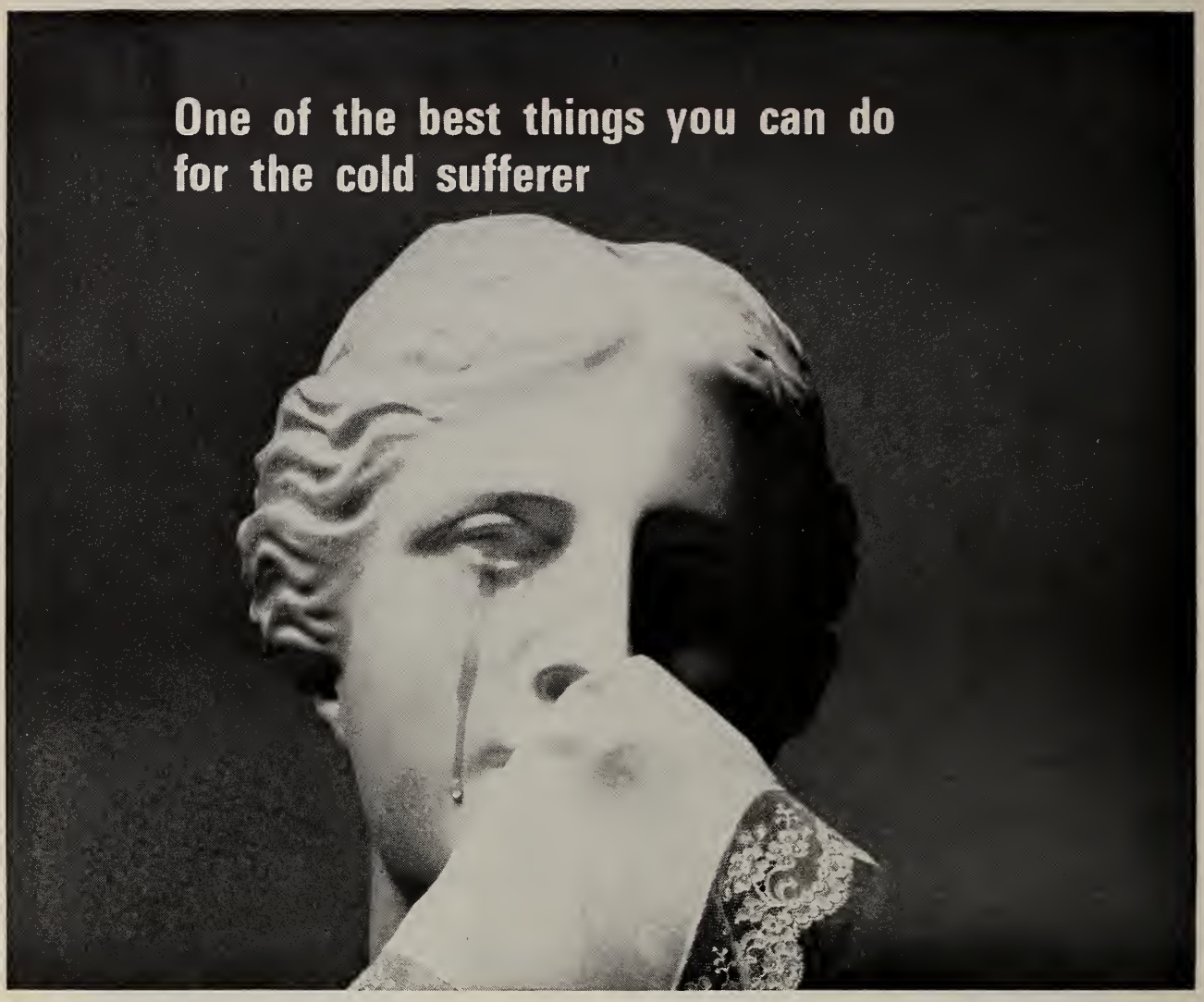
The reappointment recommendation stems from the CMA Planning and Goals Conference in Continuing Medical Education held in 1967. *(California Medical Association News, October 1968)*

* * *



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The New AMA Division of Public Affairs

As of September 23, 1968, the American Medical Association established a new Division of Public Affairs. It amalgamates the field staffs of the AMA and AMPAC (American Medical Political Action Committee), assumes the functions of the Division of Field Service, and takes on broader responsibilities in the public affairs area. These include a variety of community, civic and governmental activities, all vitally important to the medical profession and its ability to provide high quality health care for the American people.

The new Division of Public Affairs will be charged with implementing AMA policy that involves the necessary relationships between medicine and Government and with responsibility for conducting many of the education and research programs formerly carried out by AMPAC.

Mr. Joe D. Miller, former Executive Director of AMPAC, has been named Director of the new Division. Mr. Aubrey Gates, former Director of the Division of Field Service, has been appointed Executive Assistant in the office of the Executive Vice President of the AMA. Mr. David W. Powers, former Assistant Director of AMPAC, has been named by the AMPAC Board of Directors as Acting Executive Director of AMPAC.

AMPAC will remain separate from the AMA and be governed as before by its own Board of Directors. It will continue to function as the political action arm of organized medicine.

The Thinking Behind the AMA Decision

In recent years the conditions under which medicine has practiced have changed greatly. So too has the capability of the medical profession to treat patients.

The structure and functions of the AMA must accordingly be revised to direct these changes in ways that best serve medicine and the public.

Medicine and its practice depend increasingly on public attitudes. Public attitudes in turn affect Government. And Government itself has within its power the ability to alter—for better or worse—the way in which medicine is practiced. At stake is the effectiveness of the health care available to 200 million Americans.

The interrelationship between the medical profession, the public, and Government is increasingly intimate as a result of some relatively recent developments.

1. The so-called scientific explosion, which has revolutionized medical science and technique and vastly increased the value of what medicine has to offer.
2. Public awareness of this, leading to a surging demand for the best that medicine has to offer.
3. Growing affluence, which enables a sizable portion of the public to expect it should have the best of everything.
4. Health insurance, increasingly widespread, which brings quality care within the means of millions and increases the demand for it.
5. The influence of labor unions, liberals in both political parties, and intellectuals of media and Government in pressing for social benefits for large segments of our society.
6. Public acceptance of Government as a legitimate social and economic planner.

These and other factors have altered the environment in which medicine is practiced, health care is sought, and Government seeks to act.

Meanwhile, medicine's problems are complex and pressing: the shortage of physicians and other members of the health team in relation to the multiplied demand; the gap between demand for hospital and nursing home services and their availability; the rising costs of health care. These and other problems must ultimately be solved, either by the private sector or—by default—Government.

The critical element in medicine's search for solutions is time. Given enough time, most of the answers can be found by the

private sector. Given insufficient time, Government is likely to act precipitately in response to public pressure.

For the foreseeable future, changes in medical science and practice will affect the environment in which they are made. And at the same time that environment will influence the manner in which medical science and practice function.

The AMA, as the organization that unifies the Nation's physicians, must prepare to meet present and future health needs in the United States, direct the present trends to the degree legally feasible and argue its case persuasively with the Government and the public.

Thus, no aspect of the AMA's planning, operation or activity is independent of what the AMA is able to accomplish in public affairs. This is true even of the scientific and medical areas in which the AMA functions so competently; the ability to perform capably in these areas requires the freedom in which to do it.

A new approach is therefore required, along with a new organizational structure with which to execute it. The creation of a new Division of Public Affairs is a first step in that direction. The move is practical and logical. It will result in better staff coordination, administrative efficiency, and economical operation. When fully operative the Division of Public Affairs will be capable not only of providing better legislative and socioeconomic services to the constituent and component medical societies but of coordinating them better from the management to the field levels.

The decision to create the new Division responds to a resolution introduced by the Illinois delegation and referred to the Board of Trustees by the House of Delegates at the June, 1968 meeting of the AMA. The resolution called for the development of a public affairs program within the AMA.

The Responsibilities of the Public Affairs Division

One definition of public affairs is "a systematic effort to safeguard an organization's rights and fulfill its responsibilities to the community while encouraging individual members of the organization to safeguard their own rights and fulfill their own responsibilities."

Applying that definition, then, the Division of Public Affairs will systematically undertake programs to safeguard the rights of freely practiced medicine, to assist the AMA in its efforts to discharge its responsibilities to the profession and the Nation, and to encourage individual physicians and their wives to safeguard their own rights while fulfilling their own responsibilities as members of a free society.

The goals of the Division are:

1. To help inform the profession, public and legislators of the problems facing medicine.
2. To foster a better understanding of Government on the part of physicians and their wives and to stimulate their activity in civic and political affairs.
3. To help medicine amplify its voice in community, state and national affairs.
4. To disseminate information of interest to legislators and maintain a practical legislative liaison.
5. To encourage physicians and their wives to join the PAC movement and to become active in the political party of their choice.
6. To serve the component and constituent medical societies effectively and frequently with legislative and political information.
7. To provide nonpartisan political education programs for individuals and medical societies.
8. To undertake such objective, educational research as may be helpful.
9. To furnish close liaison between the AMA and the component and constituent societies to foster communication on public affairs.
10. To maintain contact and improve coordination with other public affairs movements of a nonmedical nature.

In the performance of these functions, the Division of Public Affairs will work closely with the other divisions of the AMA and with appropriate Councils, and will routinely maintain liaison with AMPAC and State PACs.

The Division will be responsible for the legislative representation of the AMA with

the Congress and for routine liaison with the Executive Departments and agencies of the Federal Government.

The Role of AMPAC

AMPAC will maintain its individual entity as an organization separate from the AMA and governed by its own Board of Directors. As in the past, it will function as the political arm of medicine.

AMPAC will continue to conduct certain research programs, publish *Political Stethoscope,* maintain a lending library of films and political books, and conduct selected programs of political education.

Its staff will maintain up-to-date files on the political situation—state by state and district by district. This will be available to the Review Committee of the AMPAC Board routinely and will guide the Committee in its decisions involving candidate support.

AMPAC will continue to serve the individual State PACs in matters involving political action, the exchange of information, the transmittal of membership dollars and political allocations, etc. But with the establishment of the new Division of Public Affairs coordination of AMPAC activities with those touching on legislation and regulation will be closer and more effective.

As AMA salaried employees the field staff of the Division of Public Affairs will not, of course, engage in political activities in which the support of candidates for nomination or election to public office are involved. Such activities will continue exclusively as AMPAC functions.

Conclusion

Some details of this reorganization have not yet been worked out. Others may not be finally resolved until a management study, recently initiated, develops its final recommendations for the administration of the AMA.

AMPAC anticipates no transitional problems arising from the reorganization that will in any way diminish the effectiveness of its ability to support candidates.

As for the future, not only does the reorganization enhance the role of political action in medicine's public affairs complex, it also reinforces the political education effort with the full resources of medicine.

In summary, then, the reorganization produces immediate benefits to both the AMA and AMPAC. Those benefits will be multiplied in the years ahead as improved staff coordination, greater administrative efficiency, better liaison and enhanced services to the component and constituent societies pay dividends to organized medicine at every level of its participation in public affairs. (*Medical Annals of the District of Columbia,* Dec. 1968.)

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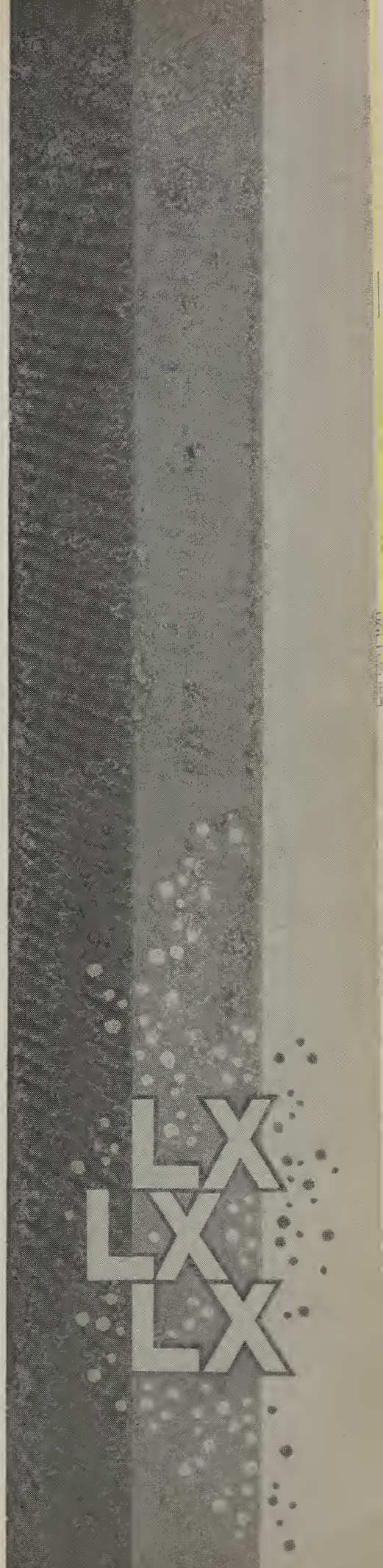
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Instructions to Contributors

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Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

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Journal of the Tennessee Medical Association
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Apparatus is now available to carry out a treadmill exercise test in the office. This parameter of exceeding importance—myocardial function under the stress of exercise—can now be studied and recorded.

Office Evaluation of Cardiac Function by Exercise. Utilizing the Graded-Treadmill and Constant Monitoring*

CRAWFORD W. ADAMS, M.D., and ROBERT G. KIGER, M.D.,† Nashville, Tenn.

The art of conducting an examination of the cardiovascular system consists of inspection, palpation, percussion, and auscultation. Little emphasis has been placed upon the important parameter of *performance*. Now that techniques are available to estimate adequately cardiac performance simply and safely, graded exertional stress should be included as an integral part of the physical examination. Not infrequently, cardiac surgery has been advised, disability enforced, and insurance premiums "rated" without first conducting a satisfactory evaluation of cardiac function.

Although suspected after a careful history, early coronary artery disease, myocardial disease, and valvular disease may remain unrecognized if the physical examination is conducted only at rest. Unless the heart is challenged by exercise, altered myocardial physiology and particularly cardiac reserve may not be fully appreciated. An impaired circulation examined at rest may be adequate for perfusion of the tissues of the body; consquently, the physical examination and electrocardiogram may be "normal." When the coronary reserve of the same circulation is challenged by exercise, early pathologic alterations of the circulation and myocardium may be detected. The coronary reserve may be defined as the differential blood flow required to maintain normal cardiac function at rest and maximal blood flow during a maximum work load. Whenever the coronary or myocardial reserve is diminished to the extent that blood flow is inadequate to maintain normal function, further restriction of flow, or increase in work of the myocardium produces *coronary insufficiency* with subsequent myocardial anoxia and necrosis. This sequence of events creates changes in myocardial potential reflected as "currents of injury," significant electrocardiographic ST-segment and T-wave changes, cardiac arrhythmias, and various degrees of heart block. In addition to coronary atheroma, other pathophysiologic events may produce coronary insufficiency and should be differentially considered before the patient is informed that he or she has coronary artery disease (Table 1).

Clinical Evaluation

The physician may estimate cardiac function by the clinical history, physical examination, and presently available laboratory procedures. For example, impairment of cardiac muscle or valve function is suspected if the patient complains of unusual "fatigue," "shortness of breath," "dizziness or fainting." Impairment of the circulation is suspected if the patient complains of "irregularity of the heart" or "chest pain." Cardiac symptoms, however, vary considerably with activity, ingestion of food, and the physical conditioning of the patient.

The physical examination adds little to the quantitative evaluation of cardiac function unless overt findings of heart failure

*Presented at the meeting of the Southern Thoracic Society, September 13, 1968, Jacksonville, Florida

†From the Department of Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee

Table 1

CORONARY INSUFFICIENCY

I. Reduction in Coronary Blood Volume	II. Decrease in Coronary Perfusion Pressure		III. Increase in Work of Myocardium	IV. Decrease in O_2 Saturation or O_2 Transport Capacity
	A. Lowering of Aortic Diastolic Pressure	B. Decrease in Cardiac Output		
1. Coronary atherosclerosis	1. Aortic insufficiency	1. Aortic stenosis	1. Liberation of catecholamines (pheochromocytoma)	1. Pulmonary disease
2. Polyarteritis nodosa	2. Pulmonary-aorta communication	2. Mitral stenosis	2. Administration of epinephrine	2. Right to left shunts
3. Syphilis of Coronary ostia	3. Ruptured Sinus of Valsalva aneurysm into the right ventricular chamber	3. Massive pulmonary embolism	3. Cardiac hypertrophy	3. Severe anemia
4. Emboli to coronary artery		4. Extensive myocarditis	4. Extreme physical exertion	4. Carbon monoxide poisoning
		5. Intracardiac obstructive lesions a. Myxomata b. Thrombi	5. Prolonged tachycardia	5. Severe hemorrhage
		6. Obstructive pulmonary arterial disease		6. High altitude flying (above 15,000 feet)
		7. Shock		7. Polycythemia vera
		8. Constrictive pericarditis		
		9. Myocardial failure		

are present. Left ventricular failure is confirmed by the findings of basilar pulmonary moist rales, a diastolic third sound, pulsus alternaus, or distension of the jugular venous pulse with the chest elevated to 45 degrees. Right ventricular failure and long-standing left ventricular failure may result in hepatomegaly, ascites, or edema of the sacrum and lower extremities.

Laboratory Evaluation

Currently, laboratory procedures available in the physician's office are usually limited to the electrocardiogram, the chest roentgenogram, measurement of venous pressure, and circulation time. The resting electrocardiogram may demonstrate hypertrophy of the various chambers, localized damage of the myocardium, and impairment of the coronary circulation. The post-exercise electrocardiogram (Masters' two-step test)[1] has been used for many years to evaluate cardiac function. After the double Masters' two-step test, however, positive electrocardiographic changes may be expected in only 57% of patients with underlying impairment of the coronary circulation.[2] The reason is obvious. Significant electrocardiographic changes usually are rate dependent, and by the time the technician returns the patient to the examining table and readjusts the electrodes, the heart rate has returned to normal levels and the electrocardiographic changes may have disappeared. Utilizing standardized graded treadmill exercise with constant monitoring, the positive yield increased to 76 percent.[2] Doan and associates,[3] in healthy men, found the maximal exercise test *nine* times more sensitive than the double Masters' two-step test, and 62% more sensitive in men with clinically detectable cardiovascular disease. The chest roentgenogram or "cardiac series" demonstrate the degree of pulmonary vascularity, congestive changes, chamber enlargement, and congenital or acquired malformations of the cardiovascular structures.

Sophisticated measurements of cardiac function require the services of the hospital cardiac and pulmonary laboratories. By the use of cardiac catheterization and angiocardiography, cardiac output, valvular gradients, and other hemodynamic studies of function can be obtained. However, if the measurements of oxygen consumption or

the measurements of dye-dilution curves are not conducted properly, cardiac output may be measured inaccurately and the results be misleading.[4] Exercise during cardiac catheterization is most important, for many "normal" resting hemodynamic observations become abnormal during exercise. Utilizing angiocardiography, cardiac volume at the beginning and the end of systole can be measured.[5]

The treadmill is not a recent innovation. Historically, the "treadmill" was first used by the Romans for construction of large projects. In 1779, treading-in-the-wheel was initiated as a form of hard labor punishment, and in 1843 Betham recommended the walking-wheel as a means of keeping prisoners physically fit. "In 1856, Edward Smith became interested in the 'treadmill' partly because of his concern for reform, and partly because of his intense interest in the workings of the human body. He may have believed that if he could demonstrate a deleterious effect of treadmill labor on the human body, using physiological techniques, British authorities would be sufficiently impressed to outlaw the treadmill as a prison labor device. If this was his hope, it was destined to meet with little success, but his entry into the field was scientifically most advantageous. Technologically and intellectually, his approach to the problem was far in advance of his time. It represented the first systematic inquiry into the respiratory and metabolic response of the human subject to muscular exercise."* Smith's human treadmill experiments on pulmonary function included measurements of inspired air (liters per min.), respiratory rate, respiratory stroke volume (ml), pulse rate and oxygen production (gm per min), at rest, after 5 minutes of exercise, and at 13 minutes after exercise.[6,7] Additional measurements for various types of exercise, including swimming, moving riding on bus and trains, horseback riding, walking, and the treadwheel were conducted in 1857.[8]

For many years, several quantitative exercise procedures for measuring cardiac function have been recommended. [9,10] However, these tests have not been accepted for universal use because the equipment has been bulky and expensive. As the need for these procedures have increased, equipment has been adapted for office use at a reasonable cost. A good test of function should be standardized and performance graded to compensate for any existing deficiency in the oxygen requirement of the myocardium. The exercise test must be "tailored" to the patient, for many discrepancies exist between cardiac performance and the underlying state of the myocardium. The most obvious discrepancy is the physical endurance of the individual. Patients with heart disease are frequently able to perform better than individuals in poor physical condition with normal cardiac function.[11,12] The graded treadmill determination using constant monitoring is most helpful in this respect. Individuals with poor exercise tolerance rapidly develop tachycardia which soon "levels off" without abnormal electrocardiographic changes. The patient with impaired myocardial function or restricted coronary circulation usually demonstrates electrocardiographic abnormalities at a comparable speed and grade, and the heart rate continues to increase. The initial test may serve as a control for a subsequent comparative evaluation of cardiac function and performance.

The treadmill exercise procedure is particularly useful to reassure the anxious patient with functional heart disease that he is able to perform maximal exercise without cardiovascular symptoms or abnormal electrocardiographic changes. One executive remarked, "If I can do this much exercise without symptoms, I know I don't have heart disease!"

In approximately 40% of patients in whom an acute myocardial infarction or sudden death occurs, there is no previous clinical evidence of underlying coronary artery disease.[13] Therefore, the coronary-prone individual must be detected before infarction occurs if the high incidence of morbidity and mortality from coronary artery disease is to be significantly lowered. A carefully monitored graded exercise test is easily performed and detects a high percentage of the coronary-prone individuals by demonstrating cardiac arrhythmias, varying degrees of block, and significant

*Quoted by C. B. Chapman, in the Journal of Historical Medicine and Allied Sciences, 1967.

electrocardiographic changes. The patient with coronary artery disease should be thoroughly evaluated for tolerance to exercise before engaging in a program of rehabilitation. In addition to treadmill performance with constant monitoring, blood pressure and estimate of heart volume are recommended.

Method

Sophisticated studies utilizing exercise as a test of cardiac function have been adequately described in the literature.[3,14,15] The treadmill exercise test with constant monitoring is easy to perform and has been successfully employed as an office procedure for over three years on more than 1,000 patients. Although there have been no instances of acute myocardial infarction or death during or after the treadmill procedure, we are well aware of this potential hazard.[16,17] Precautions include a tray of emergency drugs, oxygen with airway equipment, and a direct current defibrillator. The procedure is carried out by one physician and an office assistant. Digitalis derivatives, quinidine, procaine amide, Dilantin sodium, diuretic agents, thyroid and nitrate preparations may give "false positive" electrocardiographic changes. These agents are withheld if possible to allow their elimination from the body. After the resting electrocardiogram is obtained, exercise electrodes are *carefully* applied. An anterior unipolar lead (V4 to V6 position) and an anterior-posterior bipolar lead (interscapular or subinterscapular) have been found satisfactory for monitoring. In our experience, the anterior lead is by far the most rewarding. Bellet and associates[18] found the use of additional leads increased the incidence of positive findings by 21 percent.

Electrocardiographic changes are rate dependent; therefore, constant monitoring is recommended. Hardwire or radiotelemetry methods are used to observe significant electrocardiographic changes during exercise or shortly thereafter on an oscilloscope. Simultaneous electrocardiographic recordings are made continuously or at 30-second intervals. Satisfactory exercise is achieved by walking or running on the graded treadmill. The treadmill has the advantage of progressively increasing the speed and grade of exercise without interruption of the procedure. Exercise is initiated at a speed of 1.5 miles per hour (mph) against a 10% grade and increased 0.5 mph every 2 minutes up to 5 mph. If there are no abnormal symptoms or electrocardiographic changes, performance is continued until 85 to 100% of the predicted maximum rate is achieved.[9] Exercise is immediately discontinued if the subject develops chest pain, unusual dyspnea, faltering gait, marked fatigue, exertional hypotension, severe leg pain, or significant electrocardiographic changes. Post-exercise observations and recordings are continued for at least 10 minutes. Significant electrocardiographic changes consist of at least 1.0 mm ST-segment depression with a horizontal or downward ST-segment slope, an increase of the QX/QT ratio greater than 0.5, inversion of the T or U waves or any degree of heart block. Junctional ST-segment depression is *not* considered significant.

In addition to the treadmill exercise, other parameters may be measured simultaneously. These include brachial blood pressure measured by cuff or intra-arterially,[19] ventilation, oxygen consumption, carbon dioxide production, respiratory quotient, and alveolar gas tensions.[20]

Case Reports

The following examples demonstrate significant electrocardiographic changes achieved by performance of treadmill exercise using constant monitoring.

Case 1. This 37 year old male executive with moderate retrosternal discomfort during exercise had been reassured that he had a "normal heart" on the basis of normal serial resting and double Master's two-step tests (Fig. 1). The history disclosed five borderline coronary risk factors: the BP was 142/98 mm. Hg; the fasting blood sugar was 135 mg. per 100 ml. with a positive glucose tolerance test; 15 pounds overweight; smoked 40 cigarettes a day; and avoided exercise. The treadmill exercise procedure with continuous monitoring produced retrosternal pain, ST-segment depression, and T wave inversion indicative of underlying coronary artery ischemia after 6 minutes of progressive exercise to 3½ mph against a 10% grade (Fig. 2).

Case 2. For 2 years this 38 year old housewife complained of recurring tachycardia and "fullness" in the neck followed by weakness, dizziness, and occasionally syncope after exercise.

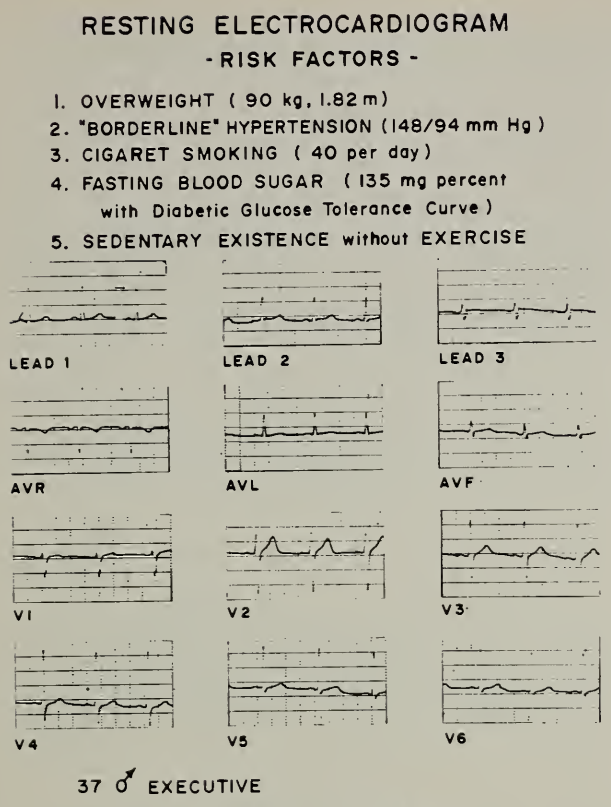


FIG. 1 (Case 1). Resting EKG.

The resting EKG was normal (Fig. 3). This serum potassium was 2.3 mEq/L. A thorough evaluation for primary causes of hypokalemia failed to disclose abnormal findings. The treadmill exercise with continuous monitoring demonstrated paroxysms of ventricular tachycardia and ventricular bigeminy (Fig. 4). Following an intravenous infusion of 40 mEq of potassium chloride, the ventricular irritability disappeared (Fig. 5). For the past 3 years, supplemental potassium orally has controlled the paroxyms of tachycardia.

Case 3. For 2 years this 54 year old salesman with benign hypertension complained of retrosternal pain, sweating, and nausea during exertion. Serial resting EKGs and double Master's two-step tests failed to demonstrate abnormal changes. (Fig. 6) The treadmill exercise under constant monitoring produced intermittent left bundle branch block followed by retrosternal pain (Fig. 7). For the past 3 years a program of dietary sodium restriction, mild sedation, and progressive exercise has enabled this man to resume normal activities without chest pain or hypertension; however, the EKG. now shows chronic left bundle branch block.

Case 4. This 33 year old male attorney complained of tachycardia, chest pain, and fatigue for 5 years. The resting EKG was within the limits of normal (Fig. 8). To reassure this overly concerned patient, cardiac performance was recommended utilizing treadmill exercise. Exercise was initiated at a speed of 1.5 mph against a 10% grade. After 2 minutes at a speed of 2 mph, paroxysmal atrial tachycardia occurred at a rate of 150 per minute and lasted for 5 minutes (Fig. 9). Demonstration of the origin of the tachycardia and the amount of exercise required to produce the abnormal rhythm reassured the patient and enabled him to prevent the tachycardia by limiting his physical activities and discontinuing cigarette smoking.

Case 5. (Courtesy of Jean Roughgarden, M.D.)

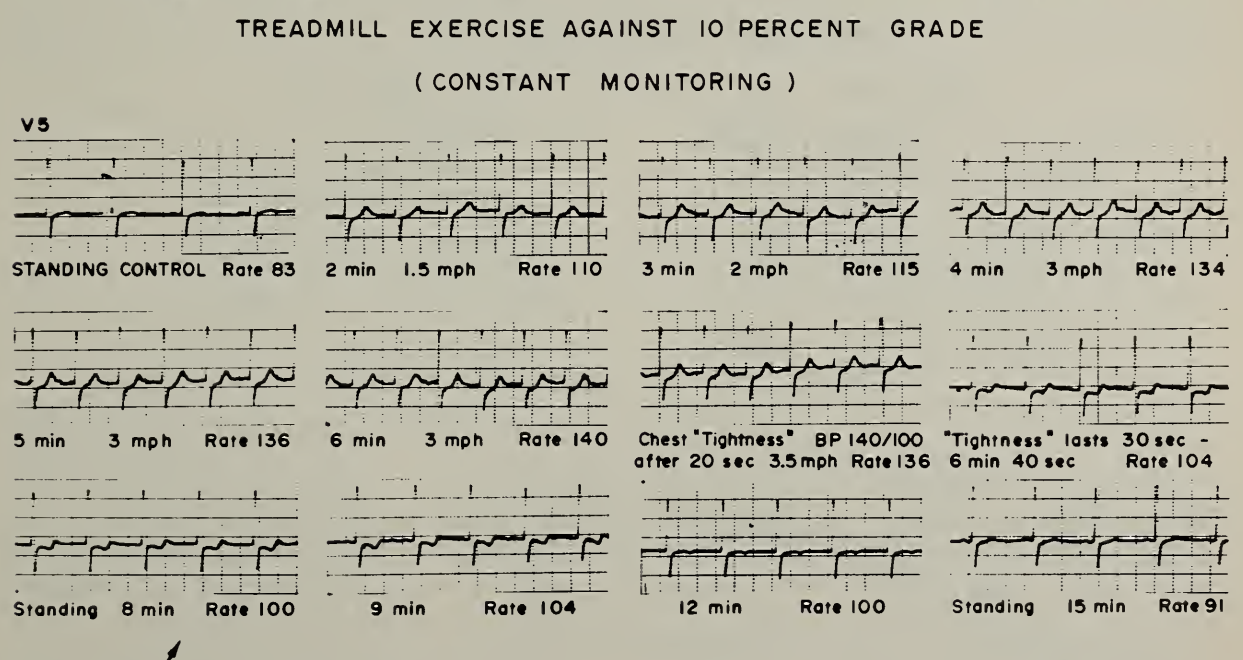


FIG. 2 (Case 1). ST-segment depression occurred at a rate of 134 per minute after 4 minutes of 10% graded-exercise. Angina pectoris developed after 6 minutes and 20 seconds, followed by depression of the ST-segment slope and biphasic T-waves. The EKG. returned to control level 11 minutes after exercise was discontinued.

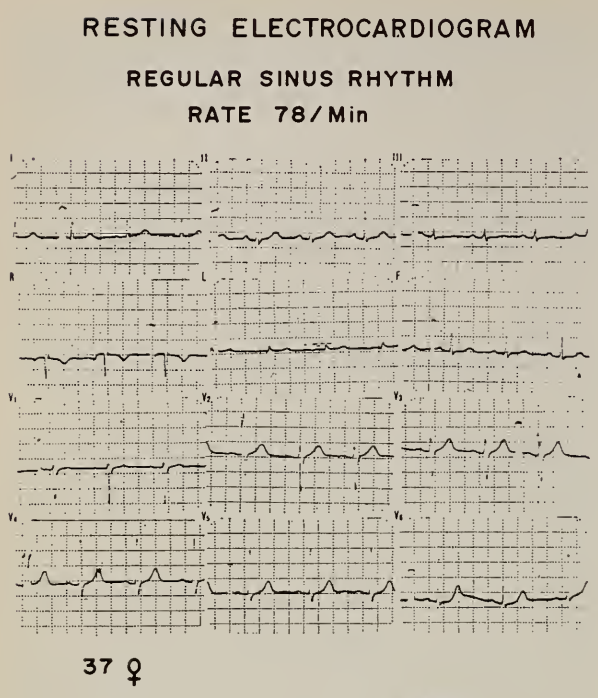


FIG. 3 (Case 2). Resting EKG.

This 30 year old woman complained of retrosternal "tightness" radiating to the left shoulder on several occasions following anxiety and apprehension. Two resting EKGs demonstrated nonspecific T-wave changes suggestive of ischemia. Other than hypertension (180/100 mm. Hg.) no other abnormality, including renal arteriography, renin assays, determination of 24 hour urine catecholamines, was found. The treadmill exercise created retrosternal pain and significant electrocardiographic changes with all grades of exercise. Intra-arterial BP total body oxygen consumption (liters per min.), and ventilation (liters per min.) were recorded simultaneously (Fig. 10). The systolic BP failed to rise. With tachycardia, however, the pulse pressure narrowed during exercise strenuous enough to produce anginal pain and significant electrocardiographic changes. Nitroglycerine abolished pulse and BP abnormalities as well as the electrocardiographic changes with the same degree of exercise. Total body oxygen consumption during exercise was abnormally high. Dietary sodium restriction, sedation, and antihypertensive therapy controlled the BP, but the patient continued to have episodes of angina pectoris.

Two years later the patient was found dead on the bathroom floor. The postmortem examination disclosed several focal pin-point, circumscribed, firm areas located in the apical portion of the interventricular septum and left ventricular wall typical of myocardial fibrosis subsequent to myocardial and septal infarctions. The major coronary arteries were patent and free of atheroma.

Conclusion

The routine office cardiovascular examination should include an adequate evaluation of cardiovascular function. The graded treadmill exercise test with constant

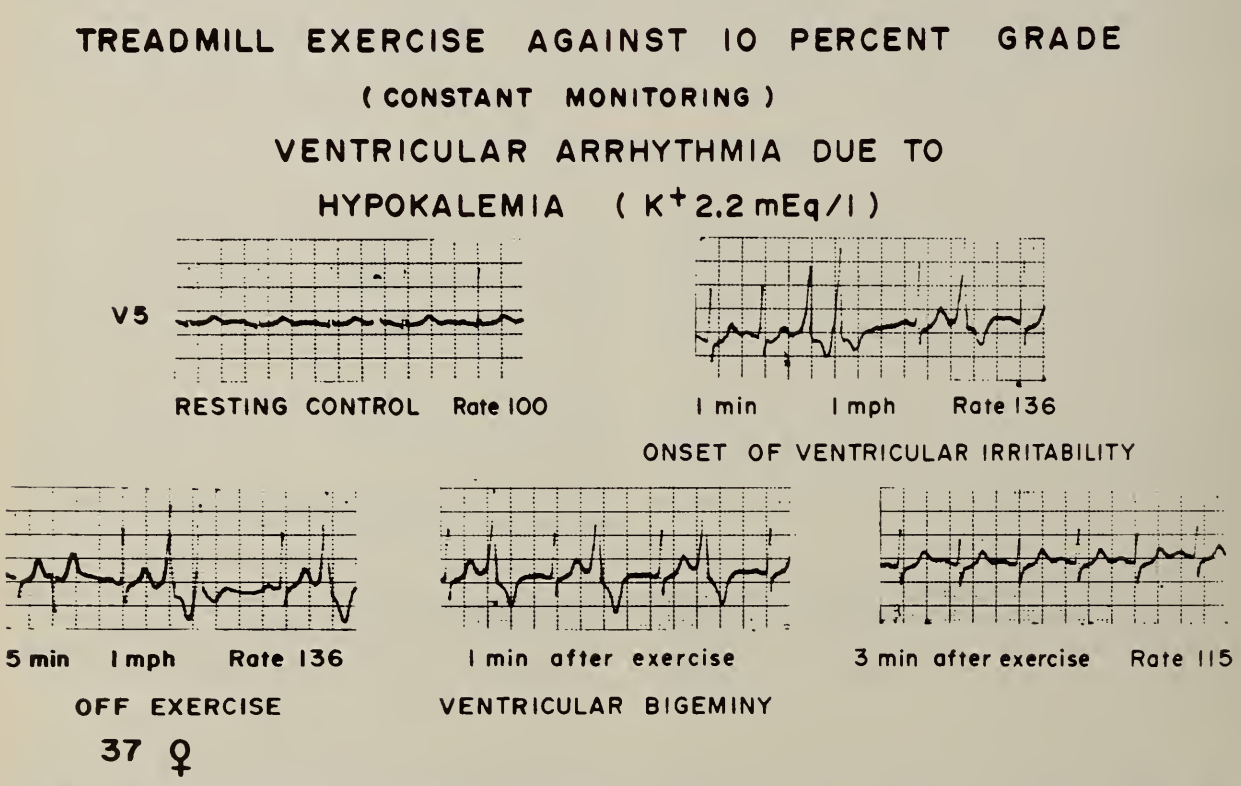


FIG. 4 (Case 2). Ventricular irritability occurred with little exercise within one minute. The rate immediately increased to 136 per minute. Ventricular bigeminy continued for 3 minutes after exercise.

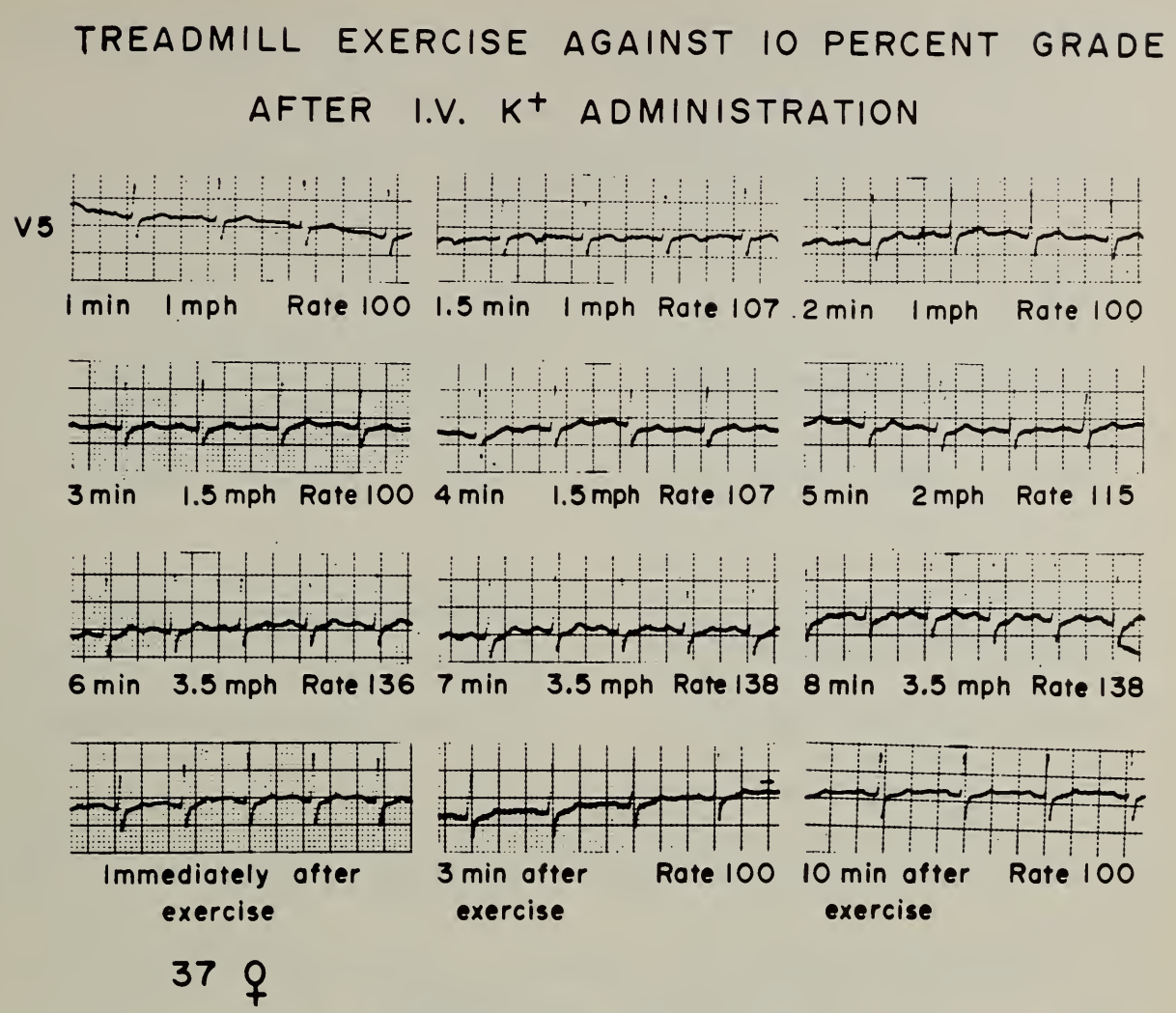


FIG. 5 (Case 2). Following the administration of potassium chloride intravenously, no premature ventricular leads occurred even though exercise was continued for 8 minutes at 3.5 mph against a 10% grade.

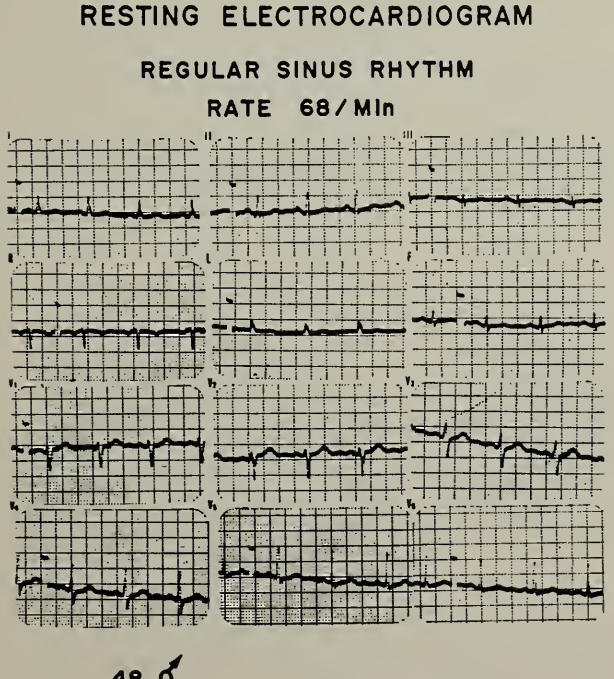


FIG. 6 (Case 3). Resting EKG.

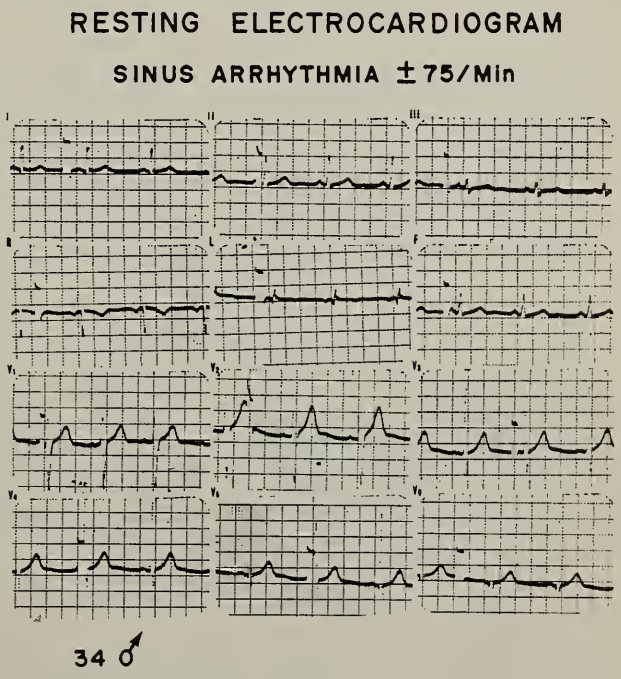


FIG. 8 (Case 4). Resting EKG.

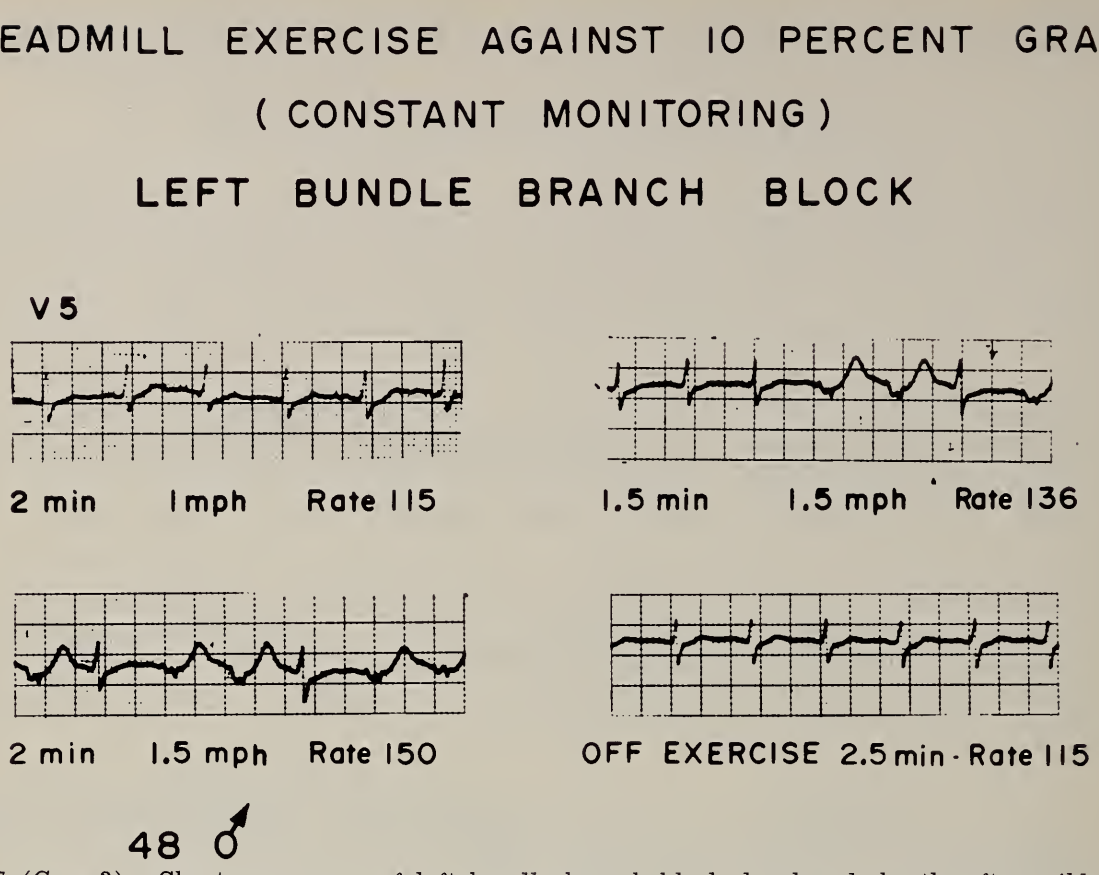


FIG. 7 (Case 3). Short paroxysms of left bundle branch block developed shortly after mild exercise at a rate of 136 per minute, and disappeared within two minutes after exercise was discontinued.

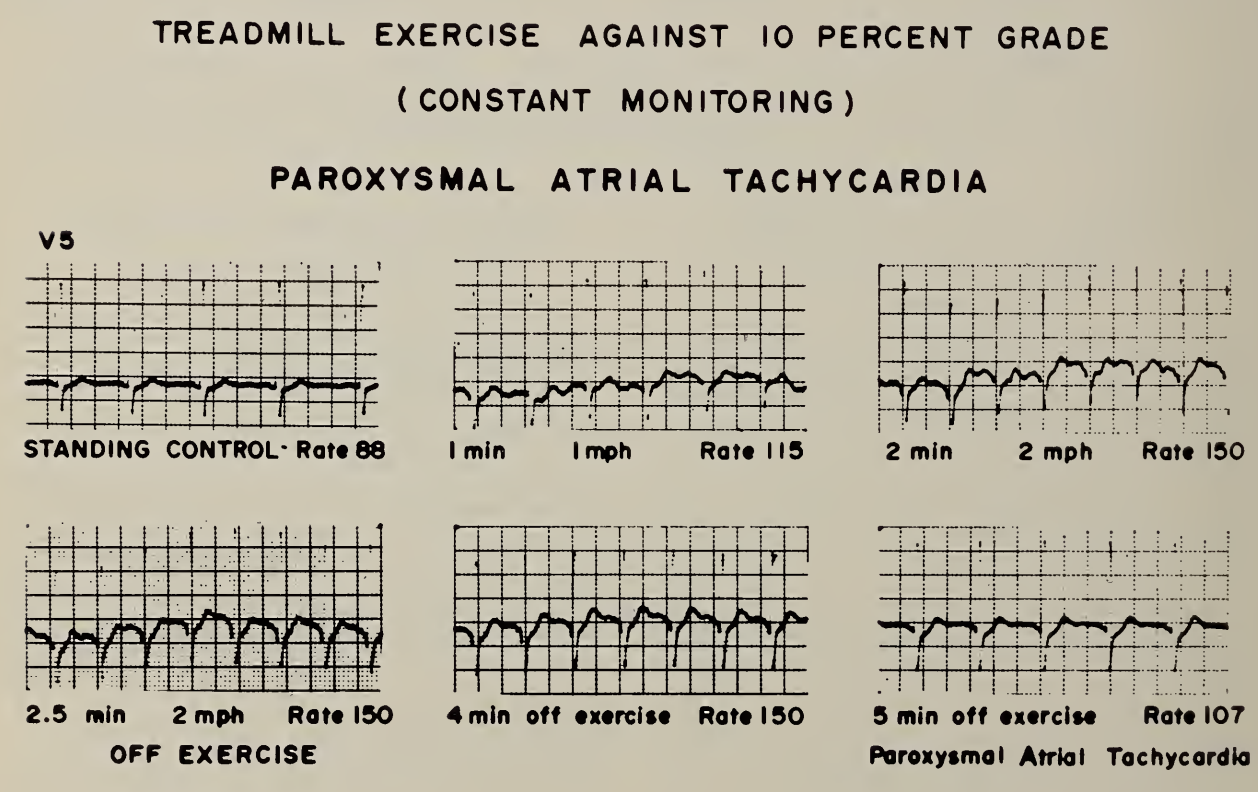
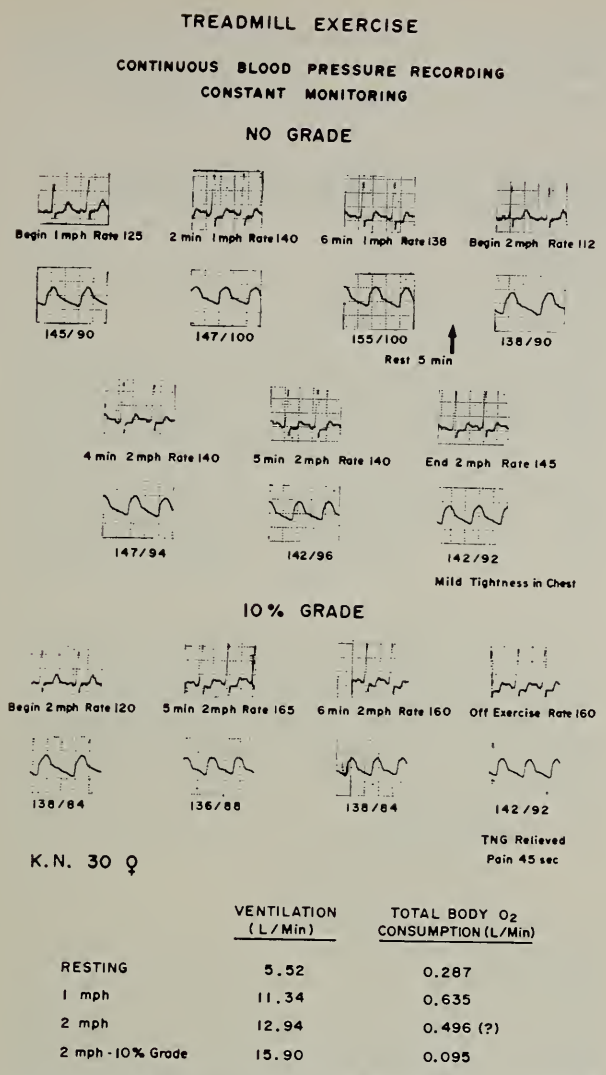


FIG. 9 (Case 4). Paroxysmal atrial tachycardia developed within 2 minutes at a speed of 2 mph and lasted for approximately 5 minutes after exercise was discontinued.



	VENTILATION (L/Min)	TOTAL BODY O_2 CONSUMPTION (L/Min)
RESTING	5.52	0.287
1 mph	11.34	0.635
2 mph	12.94	0.496 (?)
2 mph - 10% Grade	15.90	0.095

FIG. 10 (Case 5). Physiologic data in resting state and upon exercise.

monitoring may be performed simply and safely as an office procedure.

An adequate office evaluation of cardiac function will increase the yield of the coronary-prone patient and will better reassure the patient with functional cardiovascular disease.

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The author reviews the serum enzymes whose elevation may be significant in the diagnosis of cardiac disease. They may be extremely helpful, but the clinician must be aware of the time relationships of anticipated elevations and their relationship to noncardiac disease. Proper interpretation may be of great aid in the diagnosis of myocardial infarction when the EKG may be undependable.

The Enzymatic Diagnosis of Myocardial Infarction*

JOHN DAVIS HUGHES, M.D.,† Memphis, Tenn.

The measuring of certain enzymes in the blood serum as aids in the diagnosis of myocardial infarction has assumed increasing importance since LaDue, Wroblewski, and Karmen[1,2] and Mohum, Cook [3] and other pioneers in this fertile field explored these new chemical avenues.

Of the numerous enzymes evaluated in regard to their behavior in myocardial infarction three have proven extremely useful. (Table 1) They are serum glutamic oxaloacetic transaminase (SGOT), lactic dehydrogenase and its isoenzymes (LDH), and creatine phosphokinase (CPK). Others which have shown less value are aldolase (ALD), glutamic dehydrogenase (HDH), malic dehydrogenase (MDH), alpha-hydroxybutyric dehydrogenase (HBD), hexose isomerase (HSO), succinic dehydrogenase (SUC), and acid phosphatase (ACP).

Table 1

Enzymes in Cardiology

1. Serum glutamic oxaloacetic transaminase—SGOT
2. Lactic dehydrogenase—LDH
3. Creatinine phosphokinase—CPK
4. Aldolase—ALD
5. Glutamic dehydrogenase—HDH
6. Malic dehydrogenase—MDH
7. Alpha-hydroxybutyric dehydrogenase—HBD
8. Hexose isomerase—HSO
9. Succinic dehydrogenase—SUC
10. Acid phosphatase—ACP

The fact that myocardial infarction can occur without altering significantly the electrocardiogram explains why such intensive efforts have been made to perfect other diagnostic aids, including enzymatic activity. In single initial myocardial infarctions the electrocardiogram is only 80% diagnostic and in multiple infarcted hearts only about 50%[4] (Table 2). Bundle branch block,[5] Wolff-Parkinson-White Syndrome, certain tachycardias, and drug effects such as those of digitalis may present strong electrocardiographic patterns which prevent the infarction from being recognized electrically. Hence the great usefulness of serum enzyme determinations in the presence of these conditions.

Table 2

Clinical Settings Where Enzymes Help

1. In initial MI*, EKG only 80% diagnostic
2. In multiple MI's, EKG only 50% diagnostic
3. EKG patterns that block or confuse MI EKG pattern:
   - Left BBB
   - WPW Syndrome
   - Certain tachycardias
   - Digitalis effects
4. Coronary insufficiency
5. Angina

*Myocardial infarction

Before discussing these three enzymes which are now the chief ones used clinically, namely, SGOT, LDH, and CPK, it is well to emphasize that they are not contained solely in cardiac muscle, but that each is also present in certain noncardiac tissue and that each differs in this respect from the others. Thus the demonstration that a patient's serum shows an abnormal rise in the level of any of these enzymes does not in itself justify a diagnosis of myocardial infarction. As will be shown, certain noncardiac diseases or injuries must be ruled out before diagnostic reliance can be placed on elevated enzymes.

Moreover, the normalcy of a serum en-

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zyme level does not in itself negate a diagnosis of myocardial infarction, especially if it is a solitary determination of that enzyme. All of them may be normal very early in myocardial infarction and all or only some of them may be diagnostically positive later in the disease as more and more chemicals are liberated into the blood stream from disintegrating heart muscle fibers in the damaged area, or from organs secondarily affected by myocardial failure such as the liver.[6] The liver is extremely rich in SGOT, some of which may be liberated if hepatic congestion, with its increased hypoxia and venous pressure, leads to central lobular necrosis.

It is important, then, if one wishes to confirm enzymatically a diagnosis of myocardial infarction, to order promptly a determination of several enzymes—such as SGOT, LDH, and CPK—and to follow their levels daily until the diagnosis is clarified, just as one is accustomed to perform serial electrocardiograms in the same clinical setting.

SGOT

Serum glutamic oxaloacetic transaminase has been studied in great detail and is at the present time perhaps the most commonly evaluated enzyme in cardiology. The upper limits of normal is 40 units. While it is by no means as specific for myocardial infarction as creatinine phosphokinase (CPK) or the cardiac isoenzymes of lactic dehydrogenase (LDH_4 and especially LDH_5) it does have certain merits which recommend it to the clinician. (Table 3) To begin with it is

Table 3

SERUM GLUTAMIC OXALOACETIC TRANSAMINASE—SGOT

1. Most commonly measured enzyme in cardiology
2. Upper limit of normal—40 units
3. Simple to determine
4. Becomes positive in 5 or 6 hours after MI
5. Elevated in virtually all cases of MI
6. Peaks in 24 hours after infarction
7. Remains positive 3 to 5 days
8. Concentration in heart muscle 10,000 x serum concentration

simple to determine, a virtue not shared by all enzymes, and becomes positive very quickly.[7]. Experimental studies have shown that within 5 or 6 hours after infarction one may detect an elevation of this chemical in the blood, that it becomes elevated above normal in virtually all cases, and that the test is so sensitive it will detect the destruction of extremely small amounts of the experimental animal's myocardium and, inferentially, that of a human. It peaks in about 24 hours after infarction and usually remains positive for several days. Of prognostic value is the observation that there is a linear correlation between the peak serum transaminase levels and the amount of myocardial infarction.

Opinions as to the diagnostic accuracy of this test vary from 97% downward.[8] If the infarct is transmural it stands to reason that the level of this chemical will be elevated considerably as its concentration in heart muscle is 10,000 times as great as in serum.

LaDue believes that this test is quite revealing prognostically. The higher the peak of SGOT and the longer the duration of elevation the greater the degree of infarction. He stated:

SGOT 200+ units.....50% mortality
SGOT 100-200 units .....25% mortality
SGOT less than 100 units ..5-10% mortality

His belief in the reliability of this test in helping estimate the mortality rate to be expected is not shared by Freidberg,[9] however.

While the test is almost invariably positive in large transmural infarcts, if one determines it serially soon after the onset of symptoms, such is not the case in subendocardial infarction where only about 50% of such cases may show a positive score in clinical practice.[10] Some factors which may at least partially explain this is delay on the part of the patient in reporting to the physician, or delay on the part of the latter in ordering the test, and failure to follow through with serial determination when the initial report is normal.

Angina pectoris and coronary insufficiency, both of which lead to ischemia of heart muscle, do not cause a rise in SGOT.[11] It is necessary for more than ischemia to occur for SGOT to be liberated from cardiac fibers—there must be necrosis with disintegration of cell walls. In coro-

nary insufficiency, where the electrocardiogram even when repeated serially is often not definitive, the serum enzymes should be evaluated and repeated often to help clarify the exact diagnosis. If they rise to abnormal heights infarction has occurred and the patient should be treated accordingly.

The cardiac enzymes, including SGOT, may be of great help in detecting extension of myocardial infarction. The profile of the tests would then show two peaks—the first with the primary infarction and the second with the extension.

As examples of how little cardiac trauma is necessary to cause the SGOT to rise, even cardiac catheterization and angiocardiography have resulted in positivity of the test, though only occasionally.[12] External cardiac massage for cardiac arrest has been observed to cause increased SGOT values.[13] In this instance, one wonders whether the test was positive because of heart muscle damage, skeletal muscle damage, liver damage, or hypotension.

Pericardial effusion may lead to SGOT values exceeding 500 units.[14] This is probably a result of the effusion decreasing cardiac function thus leading to increased venous pressure in general and especially in the liver, hepatic hypoxia, and destruction of enzyme rich parenchymal liver cells around the central veins. In addition, if the pericardial effusion is secondary to a cardiomyopathy, such as infarction, neoplasm, or infection, one would expect a positive SGOT anyhow. Finally, pericarditis itself, a common cause of effusion, may injure enough cardiac muscle to elevate the score.

A particular diagnostic trap to be avoided is to assume in myocardial failure that myocardial infarction has occurred simply because the serum transaminase is markedly elevated. While this on occasion may be a correct assumption, it is far more likely that the chemical elevation is due to liver cell necrosis secondary to congestive failure, especially if the score is in hundreds of units. In this clinical setting it is wise also to order a glutamic pyruvic transaminase (SGPT) determination as this enzyme is concentrated chiefly in the liver and not heart, and may rise to astronomical heights in the presence of hepatic necrosis such as occurs to a varying degree in myocardial failure. The differential diagnosis can be clarified further by demonstrating positivity of the LDH cardiac isoenzymes and CPK in cardiac failure due to myocardial infarction and their negativity in failure not secondary to infarction.

So far the discussion has revolved around the use of the serum glutamic oxaloacetic transaminase in the diagnosis and differential diagnosis of cardiac disorders, including myocardial infarction, angina, coronary insufficiency, myocardial failure, pericardial effusion, and cardiac trauma.

The arrhythmias do not in themselves cause an increase in the serum level of this chemical; if such an increase occurs it signifies a complication of the arrhythmia such as myocardial failure, myocardial infarction tripped off by hypotension, or embolization of the lung, or brain. Cardiogenic shock almost invariably causes SGOT to rise, for hepatic reasons, with or without cardiac reasons.

Because various other organs such as the liver, pancreas, lung, brain, skeletal muscles, and kidneys contain goodly supplies of serum glutamic oxaloacetic transaminase, diseases of these organs may confuse the diagnostic picture by causing an elevation of the SGOT. Combinations of causes for a high serum level of this enzyme are seen commonly in clinical practice, such as in myocardial infarction complicated by pulmonary embolism and myocardial failure. In this instance the heart, lung, and liver all participate to a varying degree in the elevation of SGOT. In hepatitis, the SGOT may reach thousands of units.

But before becoming involved further in a discussion of noncardiac causes of increase in serum glutamic oxaloacetic transaminase perhaps it would be best to consider LDH and its isoenzymes and CPK, which have broadened the ability of enzymology to help us clarify confusing clinical situations.

LDH and Its Isoenzymes

Second only to SGOT, studies of lactic dehydrogenase (LDH) have provided us with another important diagnostic tool (Table 4). For over a decade now the behavior of

Table 4

LACTIC DEHYDROGENASE—LDH— AND ISOENZYMES

1. LDH upper limit of normal 550 BB units
2. Becomes positive more slowly than SGOT
3. Peaks in about 48 hours
4. Must avoid hemolysis drawing blood (RBC extremely rich in LDH)
5. Five isoenzymes: LDH_1, 2, 3, 4, and 5
6. LDH_4 and LDH_5 are cardiac isoenzymes
7. LDH_4 and 5 remain elevated up to 2 weeks after MI
8. LDH_4 and 5 are heat stable

this chemical and its isomers have been studied and it has won a place for itself in cardiology.

Wroblewski[15] in particular has explored the activity of this enzyme in myocardial infarction and has helped clarify the different significances of its isomers. Five electrophoretically distinct forms of lactic dehydrogenase have been identified and isolated from human blood and other tissues. These isoenzymes have characteristic patterns of distribution in human tissues and are labelled LDH_1, LDH_2, LDH_3, LDH_4 and LDH_5.

Cardiac muscle contains chiefly LDH_4 and LDH_5, which are often referred to as the cardiac isoenzymes of lactic dehydrogenase. Especially is this true of LDH_5 which of all five isoenzymes is concentrated the most heavily in the heart. Thus it would be expected that in myocardial infarction these two isoenzymes would be the main ones released into the blood stream, and such is the case. It is more specific to measure these two isoenzymes when one suspects myocardial infarction, and it is important to note that in the presence of infarction they may be relatively elevated when the total LDH has not yet risen to diagnostic heights, or remain so after total LDH has fallen from its peak to normal levels. In fact LDH_5 may remain positively elevated five to ten days after all total plasma enzymatic activities have returned to normal range. This is indeed a boon to the consultant who is brought in on the case days after the onset. No other human tissue has the same isoenzyme composition as cardiac muscle.

These isoenzymes migrate differently in an electrophoretic field. Those which migrate toward the anode with alpha globulin have been called the alpha LDH abnormality, and these are LDH_4 and LDH_5, sometimes referred to as the heart isoenzymes. Those that migrate toward the cathode have been called the beta gamma LDH abnormality, and they are found chiefly in the liver, skin, skeletal muscle, gastrointestinal tract, lung, and elsewhere.

A continuous elevation of LDH has been described in polycythemia and disseminated neoplasms, perhaps due to a platelet abnormality, and labelled isomorphic LDH abnormality. Sometimes those isoenzymes which migrate to the negative pole, the anode, are referred to as acid isoenzymes, and those which migrate to the positive pole, the cathode, are called basic.

In the English and Scandinavian literature the numbers are the reverse of those in the American literature. They refer to the cardiac isoenzymes (LDH_4 and LDH_5) and LDH_1 and LDH_2.

Serum LDH may be separated into heat stable and heat labile components.[16] Those which migrate electrophoretically to the cathode with gamma globulin are relatively thermolabile and those which migrate to the anode are relatively thermostable. The heat stable components comprise the cardiac isoenzymes LDH_4 and LDH_5 (American terminology) and their value lies chiefly in establishing a cardiac diagnosis or negating it.

The LDH does not become positive quite as early as the SGOT; it peaks in about 48 hours or more after the infarction, but the fact that it remains positive for days and the cardiac isoenzymes for up to two weeks is of tremendous help to the physician diagnostically. In performing the test one must be extremely careful to avoid hemolysis since the red blood cells contain large quantities of LDH which may cause spurious elevation of the score. The upper limit of normal is 550 BB units.

Evaluation of LDH is also very useful in pulmonary infarction, in which case LDH and SGOT become elevated but CPK remains normal.[17] The LDH elevation is comprised chiefly of its noncardiac isoenzymes. If pulmonary embolism is second-

ary to fresh myocardial infarction, then all three enzymes, SGOT, LDH, and CPK, rise.

CPK

The measurement of creatinine phosphokinase (CPK) is becoming more and more popular as a diagnostic tool in cardiology. It has several unique features. The fact that it is concentrated almost solely in cardiac and skeletal muscles makes it much easier to evaluate a rise in the score above normal, for if skeletal muscle damage can be excluded the odds are great that cardiac muscle damage is present.[18] (Table 5) It

Table 5

Creatinine Phosphokinase—CPK

1. Upper limit of normal 4.0 units
2. Concentrated almost solely in heart muscle Hence highly specific for heart
3. Only other organ rich in CPK is skeletal muscle
4. If skeletal muscle disease excluded elevated CPK = heart muscle damage
5. Rises more quickly than SGOT
6. Returns to normal in 3 days
7. Remains normal in failure without infarction

is particularly useful in the presence of myocardial failure as it remains normal unless myocardial infarction is the cause of failure, whereas SGOT will be elevated in failure regardless of infarction because of liver cell necrosis due to venous congestion and hypoxia. For example, in episodes of acute heart failure with left bundle branch block preventing electrocardiographic evidence of infarction from developing, an elevated SGOT could be due entirely to hepatic congestion; but if CPK is elevated in these circumstances it shows that myocardial infarction has occurred as hepatic congestion does not cause an elevated CPK.

Hess and associates[18] have suggested that CPK may have isoenzymes, one found chiefly in cardiac muscle and the other in skeletal muscle. If such turns out to be the case, another important advance in diagnostic enzymology will have been made. A small amount of creatine phosphokinase occurs in brain tissue and almost none in liver or lung. Thus there is no false elevation of CPK in diseases of the liver, lung, gallbladder, pancreas, or other abdominal organs.

The rise of CPK begins slightly earlier than the rise of SGOT after infarction but falls more quickly and percentagewise rises higher. Ordinarily it returns to normal in about three days, while it usually takes SGOT five days to do so. The upper limit of normal for CPK depends on the technique used in measuring it. In the Coronary Care Unit at the Baptist Memorial Hospital, in Memphis, 4.0 units is considered the upper limit of normal but slight elevations above that in the absence of other confirmatory evidence should not lead to a diagnosis of infarction. Usually there is clear cut positivity if myocardial infarction has occurred—the score will be 8 to 15 units or higher. There is no denying however that there is a gray zone where diagnosis is uncertain, such as scores of 4 to 6.

Infarction is not the only cardiac condition causing a rise of CPK. Bronstein[10] mentions a patient with rheumatic heart disease, hypertension, and disseminated lupus erythematosus who had a CPK level of 9.4 units. The same author observed 7 cases of acute myocardial infarction in which serial CPKs were elevated but serial SGOTs were normal. One of these patients was shown to have a subendocardial infarction.

Because skeletal muscle is rich in CPK any traumatic, infectious, neoplastic, or metabolic injury to muscle can produce an elevated CPK. Even deep intramuscular injections of medications may do so, an important point when the physician has his patient under observation for heart attack, and is controlling pain with narcotics. One should instruct the nurses to give such injections subcutaneously to avoid iatrogenic elevation of CPK.

Such muscle disorders as polymyositis, dermatomyositis, myasthenia gravis, Duchenne or pseudohypertrophic muscular dystrophy, myotonic dystrophy, fascioscapulohumeral dystrophy, ocular myopathy, and even muscle injury from arterial embolism, not to mention muscle injury from surgical trauma, especially cardiac surgery, have all resulted in varying degrees of CPK elevation. Even strenuous exercises have done so evanescently.

Griffiths[19] found CPK to be elevated in 7 of 10 patients with hypothyroidism. Others have detected a similar finding.

Hypokalemia may injure muscle fibers enough to cause elevation of CPK and various forms of coma and brain trauma may do so also. In apoplexy CPK may rise. CPK has a distinct advantage in its absence from RBC, not being influenced by hemolysis[20] or hemolytic anemia, both of which cause sharp rises in LDH, which is heavily concentrated in erythrocytes.

Conclusions

1. The measurement of serum glutamic oxaloacetic transaminase (SGOT), lactic dehydrogenase (LDH) and its isomers, and creatinine phosphokinase (CPK) has enriched diagnostic cardiology. Numerous other enzymes are being evaluated in this field.
2. These enzymes are concentrated primarily in heart muscle, especially CPK, and are liberated into the blood stream when myocardial injury, such as infarction, causes disintegration of muscle fibers.
3. Cardiac enzymatology is used mainly to establish a diagnosis of myocardial infarction when the electrocardiogram is not diagnostic of this condition. Left bundle branch block, Wolff-Parkinson-White syndrome, and remote infarctions often confuse the electrocardiographic diagnosis of myocardial infarction. Fresh infarction superimposed on these conditions is readily diagnosed enzymatically.
4. Certain noncardiac tissues are also rich in various enzymes to a varying degree, and injuries to these tissues, such as liver, lung, brain, and skeletal muscle, may cause positivity of enzyme scores. Ordinarily, however, noncardiac causes of elevated enzymes can be diagnosed readily, and by using a battery of enzyme determinations serially a correct diagnosis can be reached.
5. The enzymes most specific for heart muscle damage are CPK and the cardiac isoenzymes of LDH, namely, LDH_4 and LDH_5.
6. The early and repeated measurements of SGOT, LDH, and CPK establish a correct diagnosis of acute myocardial infarction in the vast majority of cases, regardless of electrocardiographic findings.

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* * *

GENERAL PRACTICE

General Practitioner wanted. 40-hour week. $22,500 per year. Appointment system. Contact: Ronald Eith, M.D., Alton Park Neighborhood Health Center, 100 East 37th Street, Chattanooga, Tennessee 37410.

WANTED

General Practitioners & Internists to join multispecialty group in S.E. United States. University town of 300,000. Liberal Fringe Benefits—Retirement Plan—Starting Salary $25,000—Send Curriculum Vitae to Box C, Journal of the Tennessee Medical Association.

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AFFILIATED CLINICS

Bluefield Mental Health Center
525 Bland St., Bluefield, W. Va.
David M. Wayne, M.D.

Beckley Mental Health Center
109 E. Main Street, Beckley, W. Va.
W. E. Wilkinson, M.D.

Mental Health Clinic
Professional Building, Wise, Va.
Pierce D. Nelson, M.D.

The figures on breast tumors encountered in Vanderbilt University Hospital are brought up to date. The decreasing incidence of axillary metastasis in cancer should be favorably reflected prognostically in coming years. It, too, points to earlier diagnosis.

TUMORS OF THE BREAST: Ratio of Benign to Malignant Tumors; Decrease in Percentage of Axillary Metastases*

BARTON McSWAIN, M.D., and JAMES S. DONAHOO, M.D., Nashville, Tenn.

As reported by one of us (BMcS)[1-3], there has been a steady decrease in the percentage of axillary node metastases in patients undergoing radical mastectomy for carcinoma of the breast at the Vanderbilt University School of Medicine Hospital. Our most recent report (1963) showed data through 1960. We can now present data for five periods: 1925-1945, 1946-1950, 1951-1955, 1956-1960 and 1961-1967. We have determined the percentage of the malignant and benign tumors in each period and the percentage of patients with carcinoma who had axillary metastases.

Table 1 shows that in the most recent period (1961-1967) about 80% of the breast tumors were benign, a slightly lower percentage than in the previous period (1956-1960). These 1961-1967 figures, however, include the 88 patients with carcinoma of the breast who had simple mastectomy, whereas the previous periods excluded such patients. If the patients with carcinoma who had simple mastectomy are not included, there is, in the 1961-1967 period, a further increase in the percentage of benign tumors, 84.9 benign and 15.1 malignant as compared to 84.4 and 15.6 in the 1956-1960 period. As a rule, simple mastectomy was done only on patients in whom the disease was far advanced and not as a curative procedure.

Table 1

MALIGNANT AND BENIGN TUMORS

PERIOD	Total No. Patients	Malignant No. Patients	Malignant Percent Patients	Benign No. Patients	Benign Percent Patients
1925-1945	689	352	51	337	49
1946-1950	476	149	31	327	69
1951-1955	959	147*	15	812	85
1956-1960	1239	193**	15.6	1046	84.4
1961-1967	1537	308***	20.0	1229	80.0

*One of malignant tumors was a sarcoma.
**Two of the malignant tumors were sarcomas.
***One of the malignant tumors was a lymphosarcoma.

Tables 2 and 3 show that the annual number of cases of cystic disease has increased during each successive period but that the annual number of patients with fibroadenomas and duct papillomas has remained about the same in recent years. Table 4

Table 2

BENIGN TUMORS

PERIOD	Type tumor and No. of patients: Cystic disease	Fibroadenomas	Duct papillomas
1925-1945	133	167	37
1946-1950	213	102	12
1951-1955	584	204	24
1956-1960	815	200	31
1961-1967	1229	265	38

Table 3

ANNUAL NUMBER OF BENIGN TUMORS

PERIOD	Cystic disease	Fibroadenomas	Duct papillomas
1925-1945	6	8	2
1946-1950	43	20	2
1951-1955	117	41	5
1956-1960	165	40	6
1961-1967	175	39	5

Table 4

ANNUAL NUMBER OF CARCINOMAS

PERIOD	No. of patients
1925-1945	17
1946-1950	29
1951-1955	29
1956-1960	38
1961-1967	31

*From the Departments of Surgery and Patheology, Vanderbilt University School of Medicine, Nashville, Tennessee.

shows a decrease in the annual number of patients subjected to radical mastectomy in the most recent period.

Table 5 shows the continuing decrease in the percentage of patients with axillary metastases, a result of improved lay and professional education. The encouraging decrease in the number of patients with axillary metastases should result in an increase in survival rates.

Table 5

CARCINOMAS

PERIOD	Total No. patients*	Axillary metastasis: Without: No. patients	Without: Percent patients	With: No. patients	With: Percent patients
1925-1945	352	108	30	244	70
1946-1950	149	54	36	95	64
1951-1955	146	69	47	77	53
1956-1960	191	96	50.3	95	49.7
1961-1967	220	127	57.2	93	42.8

*All patients had radical mastectomy.

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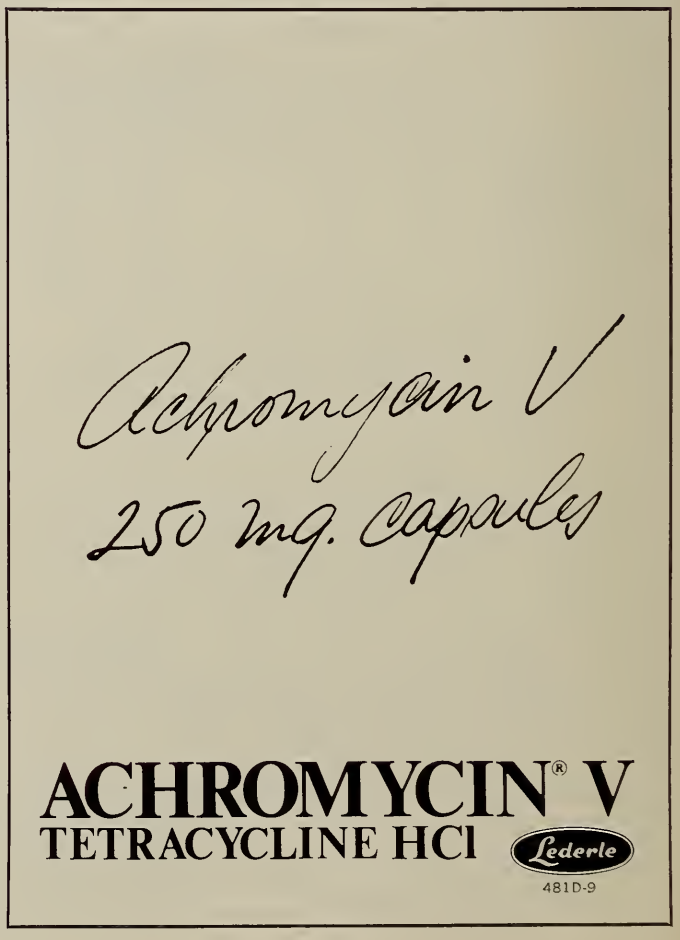
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* * *

DOUBLE INTERNAL MAMMARY ARTERY IMPLANTS: OPERATIVE TECHNIQUE. Favaloro, Rene G. J. Thor. and Cardiovasc. Surg. 55: 457, 1968.

The author (Cleveland Clinic) reports in detail the operative procedure used in 170 double internal mammary artery implants. Through a median sternotomy incision, both arteries are dissected as pedicles after the technique of Sewell. Distal dissection with opening of the rectus sheath insures adequate length of the pedicle. A self retaining retractor devised by Dr. Favaloro gives excellent exposure for developing the mammary artery pedicle. After inserting the sternal spreader a sheath of prepericardial fat is developed for later covering of the heart since the widely opened pericardium will not be closed at the termination of the procedure. Mycardial tunnels in the areas of ischemic demand are developed using a specialized instrument developed by Dr. Favaloro. Previous cine-coronary angiography (Soones technique) is necessary for the proper placement of the myocardial tunnels in the area of ischemic demand. The lateral implant allows perfusion of an ischemic right coronary artery which continues as the posterior descending branch in 60% of patients. The mortality in 170 patients undergoing bilateral internal mammary artery implantation was 8.2 percent. The mortality for single implants operated in 1966, is reported as 2.1 per cent. This increase in mortality reflects the severity of the arteriosclerotic occlusive disease in the double implants.

All areas of the left ventricle can be revascularized by the double internal mammary artery implant technique. Determination of the area of ischemic demand is necessary using cine-coronary angiography. A left ventriculogram performed at the time of left heart catheterization should be obtained in all patients. (*Abstracted for the Middle Tennessee Heart Association by George Burrus, M.D., Nashville.*)



From the Executive Director
J.E. Ballentine

MEDICAL DIGEST

News of Interest to Doctors in Tennessee

HIGHLIGHTS OF THE AMA HOUSE OF DELEGATES ACTIONS
December 1-4, 1968, Miami, Florida

Among major actions taken by the AMA House of Delegates were the following:

AMA ADOPTS DEFINITIONS OF "USUAL-CUSTOMARY-REASONABLE" . . . The House of Delegates adopted the following definitions of the terms usual, customary, and reasonable . . . "Usual" is defined as the usual fee which is charged for a given service by an individual physician in his personal practice, his own usual fee which is charged for a given service by an individual physician in his personal practice, his own usual fees; . . . "Customary" is defned as that range of usual fees charged by physicians of similar training and experience for the same service within a given specific limited geographic or socio-economic area; . . . "Reasonable" is defined as a fee which meets the above two criteria, or, in the opinion of the responsible local medical societies review committee, is justifiable in the special circumstances of the particular in question . . . The House also resolved that "whenever these terms are used in contracts or laws, that they be specifically defined in those documents."

* * * * *

ORGAN TRANSPLANTS . . . A statement on organ transplants was adopted which provided that (1) the preservation of good medical practice demands that the evolution of therapy be orderly . . . (2) that due regard for the welfare and safety of each individual patient is paramount . . . (3) that heart transplantation has brought certain medical, ethical and legal questions into critical focus . . . (4) that the potential for heart transplantation whatever that may prove to be by subsequent clinical experience, will be "severely limited" by the shortage of potential organ donors . . . (5) that the public must be made fully aware of the potentialities and limitations of heart transplantation as those are currently understood and that understanding is modified by subsequent experience.

* * * * *

MATTERS OF PATIENT CARE AND PUBLIC INTEREST . . . A report on special requirements for residency training in family practice was adopted that included affirmation of the importance of providing appropriate recognition for family physicians through approval of a primary specialty board for family practice . . . In other actions the House: accepted for information a report that a portion of the program of the Third National Congress on the Socio Economics of Health Care will be devoted to solo practice . . . Urged state medical associations where existing laws do not permit minors to consent to treatment for venereal disease to seek the enactment of such legislation . . . State and county medical asso-

ciations were urged to establish uniform membership classifications based on AMA membership categories . . . That AMA exert every effort to bring about the elimination of unnecessary documentation of medical services by the physician, hospital, or fiscal intermediary on Medicare and Medicaid patients . . . That physicians and their medical societies should strive to attain the adoption of established principles which are designed to provide the people of this nation with the highest quality of medical care, and that all physicians be reminded that as free men and women they have no obligation to accept employment and remuneration under any conditions other than those arrived at by agreement between the physician and the recipient of his service . . . That the AMA, through its representatives on the Joint Commission on Accreditation of Hospitals, take action to assure that accreditation be granted only those institutions where the rights of the medical staff are not abrogated.

* * * * *

HEALTH CARE COST AND FINANCING . . . The House directed the Board of Trustees to devote sufficient staff, facilities and funds to develop "an effective program for immediate and ongoing studies of health care costs and to report at the 1969 annual meeting" . . . The House also resolved that any "reference to paid in full coverage clearly identify those services which are indeed covered on a paid in full basis and also identify the circumstances under which those services must be rendered." This action pertains to new Blue Shield programs.

* * * * *

DISCRIMINATION . . . In AMA membership because of color, creed, or race, religion or ethnic origin, was clearly prohibited by a section added to the Association's By-Laws . . . A second amendment adopted provides a mechanism for implementing the prohibition in case of repeated violations, local medical society can be dropped from the AMA.

* * * * *

OSTEOPATHY . . . The House directed the Council on Constitution and By-Laws to prepare "appropriate by-law amendments so that qualified Doctors of Osteopathy may be admitted to full membership in the AMA, and it also adopted a Board of Trustees report providing a number of significant avenues whereby qualified Osteopaths may be assimilated into the main stream of medicine."

* * * * *

GRADUATE EDUCATION . . . A program for formal recognition by the AMA of physicians who participate in continuing medical medical education was adopted, along with a proposal to fund the recognition award. Under this plan a physician may receive the recognition award at the completion of three years of graduate training in AMA approved programs or the equivalent in research activity or an educational program leading to further advanced degrees in medical science.

* * * * *

TMA GROUP LIFE INSURANCE PROGRAM . . . 1968 was a bad year for TMA's Group Life Insurance Program. Total claims paid amounted to $118,750. Total premiums reached only $83,644.60.

Public Service Communications Legislation

Hadley Williams, Public Service Director

TMA TO SPONSOR UNIFORM ANATOMICAL GIFT ACT . . . The Legislative and Public Policy Committee will recommend adoption of a Uniform Anatomical Gift Act by the 86th Tennessee General Assembly during the current legislative session. The recommendation is an outgrowth of recent AMA House of Delegates action which accepted the Act as developed by the AMA's Liaison Committee to the American Bar Association. The Act is designed to facilitate effective action by any person during his lifetime for the utilization of all or part of his body after his death for medical, education, or scientific purposes, or for gifts of such tissue after death by the next of kin, in the absence of evidence of opposition by the deceased during his lifetime. Such gifts will help to meet the need for cadavers and the need for organs or tissue for tissue banks or transplants in appropriate circumstances. Existing laws on this subject vary greatly from state to state and the adoption of the Act will result in substantially eliminating problems of interpretation and application. Physicians are urged to encourage Legislators to adopt the Act.

* * * * *

THE BURDEN OF HEALTH CARE COSTS . . . The most recent issue of PR DOCTOR, published by the AMA, cites the efforts on the part of medical societies as well as individual physicians in trying to avert the fall-guy role in the controversy over health care prices. The following statement was printed in the Detroit Free Press last August 19th: "Physicians want higher fees. Your doctor is making twice as much money today as 11 years ago." Taken out of context, no attempt was made to follow up with the economic facts of life. Dr. Donald N. Sweeny, Jr., co-editor of the Detroit Medical News, responded with the following: "So what? Why not mention the present 'forty cent dollar', the modern efficiency of medical care, the public demands for sophisticated technology, the challenge to raise the quality of health, lower morbidity and mortality rates, the 16-hour day, and the clamour for the broad distribution of health care in the hospital? . . . The fact is that of each dollar spent on health care today the amount paid to the physician is less than it was 10 years ago." Every knowledgeable person in the health field knows this is true. But the physician, as the "figurehead" of health care, has nonetheless become the "fall-guy". He's conspicuous and considerably more tangible a target than a large impersonal bricks-and-mortar institution or a complex, gargantuan beehive of bureaucracy. The AMA is in the forefront of recognizing physicians' responsibilities in con-

trolling costs, as marked by numerous resolutions and actions of its House of Delegates. Consequently, while everybody is talking — and writing — about the high cost of health care, fairly and unfairly, the public, while enjoying unprecedented good care, feels the pinch of the purse more acutely than the bloom of good health.

* * * * *

HEW RECOMMENDS EXCLUDING CHIROPRACTIC, OPTOMETRIC SERVICES . . . An agency of the Federal Government after exhaustive study has concluded that chiropractors, who claim they can cure diseases by spinal adjustments, are so poorly educated that they cannot adequately diagnose or appropriately treat human diseases. The agency also found that chiropractors base their practice on ideas which scientists cannot accept. On the strength of these conclusions, HEW has recommended to Congress that chiropractors continue to be excluded from the nation's Medicare program. The study also reported that Optometrists performing routine eye examinations, use some of the same diagnostic procedures used by ophthalmologists to detect the presence of eye pathology. Although optometric schools offer some training in the detection of ocular pathology, optometrists are not qualified by virtue of training, background, or license to detect or diagnose ocular disease or ocular manifestations of systemic disease. Thus, the report said, optometrists are not qualified to provide complete eye examinations for elderly patients, who have a high incidence of eye disease. The earliest signs of eye disease often consist of only slight departures from normal, and are similar to normal variations in healthy patients. The optometrist is not sufficiently trained to make these distinctions. His examination may be a general screening procedure, but it does not meet the requirements for an adequate examination of the eye from signs of pathological conditions, the report said. In warning against use of chiropractors, the report said appropriate treatment could be delayed or prevented and could expose the patient to unnecessary risk. The study concluded that chiropractic theory and practice are not based upon the body of basic knowlege related to health, disease and health care that has been widely accepted by the scientific community. Moreover, irrespective of its theory, the scope and quality of chiropractic education do not prepare the practitioner to make an adequate diagnosis and provide appropriate treatment. Primary considerations in the Independent Practitioners Study, HEW said, were to assure that high quality health care is provided to persons 65 and over who are or will be beneficiaries of the Medicare program, and to assure that beneficiaries have adequate access to care.

* * * * *

SPEECH SEMINAR HELD . . . The Chattanooga and Hamilton County Medical Society sponsored, with the AMA, a Speakers Training Seminar on Tuesday, February 25, 1969. Twenty-five physicians participated in the seminar, including the officers of the society, the chairman of the Tennessee Valley Medical Assembly, fourteen members of the House of Delegates and a member of the Board of Trustees of a 750-bed hospital. The seminar was conducted by Dr. Lee Jellicoise, Associate Professor in Public Address, School of Speech, Northwestern University, along with two staff members of the AMA Speakers Bureau.

Special Section

SCIENTIFIC PROGRAM OF THE 134TH ANNUAL MEETING OF THE TENNESSEE MEDICAL ASSOCIATION

General Information

► The official program contains detailed information on the 1969 annual meeting of the Tennessee Medical Association, conducted in Gatlinburg, Tennessee, April 10-11-12, 1969.

► *Registration*

The registration desk will be located in the Auditorium in Gatlinburg. All members, visiting speakers, interns, residents, exhibitors, and guests are urged to register. Admission to all meetings and sessions and to the exhibits is by a badge secured at the registration desk. THERE IS NO REGISTRATION FEE.

Programs for all activities during the annual meeting are available at the registration desk. Those eligible to register are: Members of the Tennessee Medical Association; physicians from other states who are members of their respective state medical associations; residents, interns, medical students and guests.

► *Registration Hours*

(All times are Eastern Standard Time)

Thursday, April 10, 8:00 A.M.
(Special registration for members of the House of Delegates from 8:00 A.M. to 1:00 P.M.) (Advance registration for exhibitors and early arrivals from 8:00 to 10:00 A.M. and after 1:00 P.M.)
Friday, April 11...8:00 A.M. to 5:00 P.M.
Saturday, April 12 8:00 A.M. to 3:00 P.M.

► *Annual Meeting Headquarters*

Headquarters are located in the Auditorium in Gatlinburg, where many activities are scheduled. The specialty societies will conduct their meetings concurrently with TMA in Gatlinburg. These will be conducted in the hotels and various motels. Specialty societies meeting outside of the Auditorium are listed in this program on the "days" that the various societies are to meet.

► *TMA Headquarters Office*

The TMA headquarters offices will be located during the meeting in the back part of the Auditorium.

A member of the staff will be available to assist you at all times. Members of the House of Delegates, Officers, and Reference Committee Chairmen can secure secretarial help when needed. Your headquarters staff is available to assist you in your needs.

J. E. Ballentine, *Executive Director*
L. Hadley Williams, *Asst. Executive Director and Public Service Director*
Hank Holderfield, *Administrative Asst.*
R. M. Windham, *Administrative Assistant and Field Rep.*
Mrs. Carolyn Sandlin, *Records and Bookkeeping*
Mrs. Janice Hargis, *Secretary*
Mrs. Elva Denney, *Secretary*
Mrs. Judy Poe, *Secretary*
Mrs. Jean Ragsdale, *Administrative Secretary*

► *President's Banquet and Social Hour*

The President's Banquet will be preceded by a Social Hour sponsored by the Tennessee Medical Association, beginning at 6:00 P.M. on Friday evening, April 11, in the Auditorium.

The BANQUET will follow at 7:00 P.M. in the Auditorium. TICKETS ARE AVAILABLE AT THE REGISTRATION DESK. A limited number can be accommodated. GET YOUR TICKETS EARLY.

► *Communications—*
Emergency Telephones
Gatlinburg 436-5096 and 436-5097

A blackboard will be placed in a conspicuous location in the Auditorium where doctors' calls will be listed. PLEASE CHECK OFTEN WITH THE LISTINGS ON THE CALL BOARD.

► *Specialty Society Luncheon Tickets*

Tickets to specialty society banquets and luncheons, as well as the Woman's Auxiliary affairs, can be obtained from Specialty Societies respective registration desks. PURCHASE YOUR TICKETS AT THE TIME OF REGISTRATION. The number that can be accommodated is limited.

► *House of Delegates*

The first session of the House of Delegates will be held on Thursday, April 10, beginning at 1:00 P.M. in the Auditorium. The second session will be conducted on Saturday, April 12, beginning at 1:00 P.M. in the Auditorium. *Reference Committees* meet on Friday, April 11, in the locations listed below. *Any TMA member may appear before a reference committee.*

► *Reference Committee Meeting Rooms*

Resolutions: Auditorium—Legion Room
Constitution and By-Laws: Auditorium—City Council Room
Physician-of-the-Year: Auditorium—TMA workroom
Standing Committees (A): Riverside Motor Lodge—Skyview Room
Report of Officers: Gatlinburg Motor Lodge—Pioneer Room

Special Committees (B): River Terrace Motel—Blue Room

► *Scientific Meetings*

The scientific presentations at the 134th annual meeting of TMA will be presented on Friday and Saturday morning, April 11 and 12. (See complete program under the "days" as listed herein.) The specialty societies meeting concurrently with the Tennessee Medical Association will conduct their scientific programs and business on April 10-11 and 12. Please see the program listing the scientific meetings of the TMA and the specialty societies each day. Every member attending is welcome to attend any specific meeting of any specialty society. *Of special interest will be presentations of importance and general interest by guest speakers on Friday and Saturday, April 11 and 12.* Please note topics and outstanding speakers listed in this program.

► *Specialty Societies*

Fourteen specialty societies are conducting their meetings concurrently with the Tennessee Medical Association in Gatlinburg. Scientific and business sessions of the specialty societies will be conducted on April 10-11-12. SEE DETAILS IN THIS PROGRAM LISTED UNDER EACH OF THE ABOVE DATES AND UNDER "ANNOUNCEMENTS."

► *Woman's Auxiliary*

The Woman's Auxiliary to TMA will conduct all sessions of its annual meeting at the Greystone Motor Lodge in Gatlinburg. The registration desk of the Auxiliary will be located in the Greystone and all committee meetings, board meetings and general sessions will be conducted in the Greystone and Howard Johnson.

► *Exhibit Attendance Prize*

To encourage greater physician participation in the exhibit program, the exhibit committee continues a new feature for 1969. TMA will be giving away to a lucky physician, an RCA Portable Color Television, as an *Exhibit Attendance Prize.* To qualify, each registered physician is required to visit a minimum of thirty technical exhibits. The drawing will be held Saturday afternoon at 1:00 P.M. Instructions for participating will be given each physician at the time of registration.

► *Technical Exhibitors*

The technical exhibitors will be located in the Exhibit Hall of the Auditorium. They may be visited each day of the annual meeting beginning on Thursday, April 10, from 11:00 A.M. until 4:00 P.M.—and continued from 9:00 A.M. until 5:00 P.M. on Friday and Saturday, April 11 and 12. Exhibitors are an important part of the 134th Annual Meeting and each physician will be well repaid by spending some time visiting them and inspecting their exhibits. The exhibits will display many educational features of medical supply and latest developments in scientific undertaking.

Technical Exhibitors

The newest developments in pharmaceuticals, equipment and services will be on display, with full information available through trained and experienced representatives.

All physicians will find their time well spent in visiting exhibits and keeping abreast of what is new and useful. *YOUR ATTENDANCE IS URGED,* for your benefit as well as for an expression of cooperation with our exhibitors.

ABBOTT LABORATORIES North Chicago, Illinois	Booth 37
ARNAR-STONE LABORATORIES, INC. Mount Prospect, Illinois	Booth 30
ATLAS CHEMICAL INDUSTRIES, INC. Stuart Division Pasadena, California	Booth 41
AYERST LABORATORIES New York, New York	Booth 38
BRISTOL LABORATORIES Syracuse, New York	Booth 45
CENTURY LABORATORIES, INC. Metairie, Louisiana	Booth 23
CIBA PHARMACEUTICAL COMPANY Summit, New Jersey	Booth 21
THE COCA-COLA COMPANY Atlanta, Georgia	Booth 53
DePUY MANUFACTURING COMPANY Warsaw, Indiana	Booth 6
EDISON VOICEWRITER Nashville, Tennessee	Booth 40
ELI LILLY AND COMPANY Indianapolis, Indiana	Booth 26
ENCYCLOPAEDIA BRITANNICA, INC. Chicago, Illinois	Booth 5
EQUITABLE LIFE ASSURANCE SOCIETY Nashville, Tennessee	Booth 34
EQUITY FUNDING CORPORATION Nashville, Tennessee	Booth 46
EXERCYCLE OF MEMPHIS Memphis, Tennessee	Booth 42
FARRINGER & COMPANY Nashville, Tennessee	Booth 39
GENERAL MEDICAL CORPORATION Tafel, Knoxville & Southeastern Surgical Supply Companies Richmond, Virginia	Booth 28
IMPERIAL FASHIONS Los Angeles, California	Booths 49 & 50
INVESTMENT RETIREMENT TRUST (Denby Brandon Company) Memphis, Tennessee	Booth 52
LOWE SURGICAL SUPPLY COMPANY Maryville, Tennessee	Booth 48
MEAD JOHNSON LABORATORIES Evansville, Indiana	Booth 3
MERCK SHARP & DOHME West Point, Pennsylvania	Booth 35
MERRILL LYNCH, PIERCE, FENNER AND SMITH Nashville, Tennessee	Booth 27
MID-SOUTH REGIONAL MEDICAL PROGRAM Nashville, Tennessee	Booths 16 & 17
MUTUAL BENEFIT LIFE INSURANCE COMPANY (Dunn-Lemly-Sizer) Nashville, Tennessee	Booth 24

NASHVILLE SURGICAL SUPPLY COMPANY
Nashville, Tennessee — Booth 20

PARKE, DAVIS & COMPANY
Detroit, Michigan — Booth 19

WM. P. POYTHRESS & CO., INC.
Richmond, Virginia — Booth 10

PROGRAMMED LEARNING, INC.
Garden City, New York — Booth 18

W. B. SAUNDERS COMPANY
Philadelphia, Pennsylvania — Booth 36

SCHERING LABORATORIES
Union, New Jersey — Booth 29

G. D. SEARLE & COMPANY
Chicago, Illinois — Booth 44

SMITH, MILLER & PATCH, INC.
New York, New York — Booth 31

SMITH, REED, THOMPSON & ELLIS COMPANY
Nashville, Tennessee — Booth 32

SOUTHERN MEDICAL ASSOCIATION
Birmingham, Alabama — Booth 4

E. R. SQUIBB & SONS
New York, New York — Booth 25

TENNESSEE COLLECTORS ASSOCIATION, INC.
Chattanooga, Tennessee — Booth 47

TENNESSEE GUILD OPTICIANS
Nashville, Tennessee — Booth 22

TENNESSEE SECURITIES, INC.
Stocks and Bonds
Nashville, Tennessee — Booth 43

THE UPJOHN COMPANY
Kalamazoo, Michigan — Booth 2

WHITE SURGICAL SUPPLY COMPANY
Knoxville, Tennessee — Booth 33

VISIT THE EXHIBITS

All scientific meetings will be recessed twice for thirty minutes on each day to give doctors an opportunity to visit with the exhibitors.

HANK HOLDERFIELD
Exhibit Manager

ANNOUNCEMENTS—

SPECIAL EVENTS—FEATURES

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President's Banquet

Auditorium

Friday, April 11—7:00 P.M.

Social Hour—6:00 P.M.

Sponsored by TMA

Edward T. Newell, Jr., M.D., President, Presiding

Introduction of President-Elect—
Francis H. Cole, M.D.

Special Awards:

Presenting Tennessee's Outstanding Physician of the Year—By: Tom E. Nesbitt, M.D., Speaker of the House of Delegates

Presenting Health Project Contest Winner—By: Robert L. Chalfant, M.D., Treasurer

Presenting the Distinguished Service Award—By: O. M. McCallum, M.D., Chairman, Board of Trustees

The banquet is for TMA members, their wives and guests. Join your colleagues in dining and dancing to the music of Jerry Collins and his orchestra.

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Public Health Council

The meeting of the Public Health Council will be held in the private dining room of the Mountain View Hotel on Friday, April 11. Members of the Public Health Council will be advised of the time of the meeting and other details.

Please Reserve Luncheon Tickets Early

A number of the specialty societies meeting with TMA will sponsor luncheons during the annual meeting.

PLEASE MAKE RESERVATIONS FOR LUNCHEONS YOU ARE PLANNING TO ATTEND.

These should be made with the secretary of the specialty society.

Tennessee Chapter—American College of Surgeons—Banquet

The Tennessee Chapter of the American College of Surgeons will present their Social Hour and Banquet on Thursday Evening, April 10th in the Dining Room of the Riverside Motor Lodge.

TMA MEMBERS AND THEIR GUESTS ARE INVITED TO ATTEND THE SOCIAL HOUR AND BANQUET.

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NOTICE

Re: Scientific Presentations

The scientific presentations of all of the specialty societies meeting concurrently with the Tennessee Medical Association, are open to all physicians registered at the annual meeting. Attend the meeting of your choice.

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Technical Exhibits

The technical exhibits are located in the Exhibit Hall in the Auditorium. They are open daily at 9:00 A.M. (except Thursday).

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TMA Board of Trustees Meeting

The TMA Board of Trustees will meet in the Mural Room of the Riverside Motor Lodge at 9:00 A.M. on Sunday, April. 13.



DWIGHT L. WILBUR, M.D.
San Francisco
President, American Medical Association

Subject: **"LET'S LEAD RATHER THAN BE LED"**

Dwight L. Wilbur, M.D., San Francisco, will present an important address to the general membership on Friday morning at 11:30 A.M., April 11.

He was born in England in 1903, while his father was pursuing postgraduate studies. After earning his A.B. Degree from Stanford University, Dr. Wilbur gained his Medical Degree (with honors) in 1926 from the University of Pennsylvania, and his M.S. in medicine from the University of Minnesota.

Dr. Wilbur is known for his service as a practicing physician, teacher, editor, and public servant. For six years he has served as the consulting physician at the Mayo Clinic, and for the past 31 years he has been on the clinical faculty at Stanford University School of Medicine where, since 1949, he has been Clinical Professor of Medicine. A practicing physician for 40 years and an internist and gastroenterologist, Dr. Wilbur is Chief of Medical Service at French Hospital in San Francisco, and is on the staff of other hospitals in the Bay Area. He has served on the California Medical Association's Council, editor of its Journal, and served as chairman of the editorial board of "Gastroenterology".

Woman's Auxiliary to the Tennessee Medical Association

41st Annual Convention

April 10-12, 1969

Greystone-Howard Johnson Motor Lodge Gatlinburg

The Woman's Auxiliary to TMA will conduct all sessions of its annual meeting at the Greystone Hotel-Howard Johnson Motor Lodge in Gatlinburg. The registration desk will be located in the Greystone Hotel, all committee meetings, board meetings, and general sessions will be conducted in this complex.

Arts and Crafts Exhibit

The Arts and Crafts Exhibit of the Woman's Auxiliary will be conducted in the Greystone Hotel. Arts and Crafts will be accepted Thursday, April 10, from 3:00 to 6:00 P.M., and on Friday, April 11, from 8:00 A.M. to 12:00 Noon. Doctors and their families are urged to participate in the exhibit.

Silent Auction—AMA-ERF Fund

In connection with the Arts and Crafts Exhibit, each County Auxiliary will contribute articles which will be sold in a "silent auction", the proceeds to augment Tennessee's contribution to the AMA-ERF fund. Doctors do come with your wives—this is the perfect gift shop for that special gift to take home from Convention.

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TENNESSEE OBSTETRICAL AND GYNECOLOGICAL SOCIETY

Saturday, April 12, 1969
6:30 P.M.
Social Hour and Banquet
Ski Lodge

SPECIAL NOTICE

PROGRAM FOR OBSTETRICAL AND GYNECOLOGICAL NURSES

(Sponsored by: Tennessee Obstetrical and Gynecological Society, Tennessee Nurses Association, and University of Tennessee Memorial Research Hospital, Knoxville.)

Friday, April 11, 1969
Huff House **Mountain View Hotel**

The Tennessee Obstetrical and Gynecological Society, the Tennessee Nurses Association and the University of Tennessee Memorial Research Hospital, Knoxville, are sponsoring a special one day program for obstetrical and gynecological nurses. The general program chairman is Dr. John Howe, Knoxville, Tennessee.

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TENNESSEE CHAPTER AMERICAN COLLEGE OF SURGEONS

Thursday, April 10, 1969
12:00 Noon

COUNCIL LUNCHEON
Mural Room **Riverside Motor Lodge**

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COLOR TV-PRIZE

Don't forget to obtain your instructions and card to be punched by the exhibitors so that you

will have a chance on the drawing for the portable color television set to be given away. The drawing will be held Saturday Afternoon, April 12th. Complete details can be obtained at the registration desk.

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TENNESSEE—TRAUMA COMMITTEE

Thursday, April 10, 1969
12:00 Noon

LUNCHEON

Pioneer Room **Gatlinburg Motor Lodge**

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VANDERBILT RECEPTION

Date: Friday, April 11, 4:00-6:00 P.M.
Host: Dr. Randolph Batson, Dean of the Vanderbilt School of Medicine
Place: Mountain View Hotel, Gatlinburg
Vanderbilt Medical Alumni and guests cordially invited.

PROGRAM

Thursday, April 10, 1969

1:00 P.M. (E.S.T.)

House of Delegates

Auditorium

Gatlinburg

SPECIALTY SOCIETIES

TENNESSEE STATE ORTHOPAEDIC SOCIETY

Registration

Legion Room **8:30 A.M.** **Auditorium**

9:00 A.M.

Business Meeting

10:00 A.M.

Intermission to Visit Exhibits

10:15 A.M.

Business Meeting

12:00 Noon

LUNCHEON

(Dining Room—Gatlinburg Motor Lodge)

1:00 P.M.

SCIENTIFIC PROGRAM

Legion Room **Auditorium**

"Posterior Tibial Tendon Transfer in the Cerebral Palsied Child"

By: Fred P. Sage, M.D., Memphis

1:20 P.M.

"Intraspinal Tumors in Childhood—Orthopedic Significance"

By: Charles Emerson, M.D., Nashville
(by invitation)

1:40 P.M.

GUEST SPEAKER

Albert B. Ferguson, Jr., M.D.
Professor of Orthopedic Surgery,
University of Pittsburgh

"Pathology of Degenerative Arthritis and the Place of Osteotomy in its Treatment"

Intermission to Visit Exhibits

3:00 P.M.

"Cine Diagnosis of Soft Tissue Injuries of the Cervical Spine"

By: Edward Buonocore, M.D., Knoxville
(by invitation)

3:20 P.M.

"Use of the MacIntosh Prosthesis in the Knee"

By: J. MacDonald Burkhart, M.D., Knoxville
(by invitation)

3:40 P.M.

"Use of the Cast—Brace in Treatment of Femorial Fractures"

By: John Conolly, M.D. and
Clarence Temple, M.D., Nashville
(by invitation)

Thursday Evening

SOCIAL HOUR AND BANQUET

(Place and time to be announced)

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TENNESSEE CHAPTER—AMERICAN COLLEGE OF SURGEONS

THURSDAY, APRIL 10, 1969

12:00 Noon

COUNCIL

Meeting and Luncheon
Mural Room—Riverside Motor Lodge

GENERAL MEETING

Stephen Whaley Hall **Riverside Motor Lodge**

(All physicians attending the TMA meeting are

invited to attend the scientific sessions of the Tennessee Chapter, American College of Surgeons.)

SCIENTIFIC PROGRAM

1:30 P.M.

SYMPOSIUM

"Malignant Tumors of the Alimentary Tract"

Moderator: H. William Scott, Jr., M.D.

Panelists

Subject: **"Carcinoma Tongue and Oral Cavity"**
By: Louis Rosenfeld, M.D., Nashville

Subject: **"Carcinoma Esophagus"**
By: Walter G. Gobbel, M.D., Nashville

Subject: **"Carcinoma Stomach"**
By: J. Lynwood Herrington, Jr., M.D., Nashville

Subject: **"Carcinoma Colon"**
By: Harwell Wilson, M.D., Memphis

Subject: **"Carcinoma Anus"**
By: John L. Sawyers, M.D., Nashville

Subject: **"Chemotherapy for Recurrent Gastrointestinal Tumors"**
By: Vernon Reynolds, M.D., Nashville

3:00 P.M.

Intermission—Visit Exhibits

3:30 P.M.

"What Can the Regional Medical Program Do for the Practitioner?"

By: Charles C. Trabue, IV, M.D., Nashville

3:45 P.M.

"Basic Surgical Residency" (Presidential Address)

By: H. William Scott, Jr., M.D., Nashville

4:00 P.M.

"Management of Massive Diverticular Hemorrhage"

GUEST LECTURER: Rudolf J. Noer, M.D., Professor and Chairman, Department of Surgery, University of Louisville Medical Center.

4:45 P.M.

Business Meeting

6:30 P.M.

SOCIAL HOUR

Lounge, Riverside Motor Lodge

7:30 P.M.

BANQUET

Dining Room, Riverside Motor Lodge

TMA members and their guests are invited to attend the Social Hour and Banquet. Make reservations early. Tickets available at registration desk.

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TENNESSEE—TRAUMA COMMITTEE

THURSDAY, APRIL 10, 1969

12:00 Noon

LUNCHEON

Pioneer Room **Gatlinburg Motor Lodge**

TENNESSEE ACADEMY OF OPHTHALMOLOGY & OTOLARYNGOLOGY

THURSDAY, APRIL 10, 1969

Room B **Holiday Inn**

12:00 Noon

LUNCHEON AND PANEL DISCUSSION

Panelists: George W. Bounds, Jr., M.D., Nashville
John E. Campbell, Jr., M.D., Knoxville
David D. Donaldson, M.D., Boston, Mass.

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OPHTHALMOLOGY SECTION

Room A **Holiday Inn**

SCIENTIFIC PROGRAM

1:15 P.M.

Meeting Called to Order

By: Lee F. Cayce, M.D., President

1:20 P.M.

"Phospholine Iodide with and without Pilocarpine in Glaucoma Therapy"

By: Reed Roberts, M.D., Knoxville

1:40 P.M.

"Peripheral Iridectomy with Scleral Cautery; Follow-up and Revaluation"

By: George W. Bounds, Jr., M.D., Lee R. Minton, M.D., and Philip L. Lyle, M.D., Nashville

2:00 P.M.

GUEST SPEAKER

DAVID D. DONALDSON, M.D., BOSTON, MASS.

"Conjunctival Tumors"

2:45 P.M.

Intermission—Visit Exhibits

3:00 P.M.

"Ocular Manifestations of Dawson's Syndrome"

By: Henry T. Grizzard, M.D., Paul McNeer, M.D., J. T. Jabbour, M.D., and Roger L. Hiatt, M.D., Memphis

3:20 P.M.

"Coat's White Rings of the Cornea"

By: Robert C. Nevins, M.D., Wilkes H. Davis, Jr., M.D., and James H. Elliott, M.D., Nashville

3:40 P.M.

"Ocular Manifestations of Carotid Artery Insufficiency"

By: Reese Patterson, M.D., Knoxville

4:00 P.M.

"Behcet's Syndrome"

By: James H. Elliott, M.D., Nashville

4:20 P.M.

Case Report—"Distichiasis, Epicanthus, Alacrimia"

By: Alice R. Deutsch, M.D., Memphis

4:30 P.M.

Case Report—"Acute Posterior Placoid Pigment Epithelialopathy"

By: Joseph W. Scobey, M.D., Nashville

4:40 P.M.

Case Report—"Bilateral Brown's Superior Oblique Sheath Syndrome"

By: James W. Rayner, M.D., and Roger L. Hiatt, M.D., Memphis

4:50 P.M.

Case Report—"Of Sea Fans and Sickle Cells"

By: Wilkes H. Davis, Jr., M.D., Nashville

OTOLARYNGOLOGY SECTION

Lecture Hall **Gatlinburg Auditorium**

SCIENTIFIC PROGRAM

2:00 P.M.

"Otogenic Brain Abscess"—Movie

By: Reuben Setliff, M.D., Nashville

2:25 P.M.

"Sialopathies in the Course of Sarcoidosis"

By: Marvin Singleton, M.D., and Jose C. Gros, M.D., Memphis

2:45 P.M.

"Unusual Symptoms of Reflux Esophagitis"

By: Jerrie Cherry, M.D., Nashville

3:00 P.M.

Coffee Break—Visit Exhibits

3:30 P.M.

"Reconstructive Measures in Patients with Large Doses of Radiation Therapy"

By: Harry Rounsaville, M.D., Memphis

3:50 P.M.

"Branchial Cleff Fistula"

By: J. T. Bryan, M.D., Nashville

4:15 P.M.

"Experimental Production of Endolymphatic Hydrops in the Guinea Pig"

By: Shizuo Konishi, M.D., and John J. Shea, M.D., Memphis

Friday, April 11, 1969

SCIENTIFIC MEETINGS

General Scientific Program

Auditorium **Gatlinburg**

Presiding: Charles B. McCall, M.D., Memphis, Chairman, Scientific Program Committ, Tennessee Medical Association

9:00 A.M.

SYMPOSIUM ON TRAUMA

Moderator: Rudolph J. Noer, M.D., Professor of Surgery and Chairman of the Department of Surgery, University of Louisville School of Medicine, Louisville, Kentucky

Subject: **"Community Organization for the Medical Management of Mass Casualties"**
By: C. Robert Clark, M.D., Chattanooga

Subject: **"Ambulance Service in Tennessee"**
By: C. Harwell Dabbs, M.D., Knoxville

Subject: **"Management of Chest Injuries"**
By: David P. Hall, M.D., Chattanooga

Subject: **"Blunt Abdominal Trauma"**
By: John H. Foster, M.D., Professor of Surgery, Vanderbilt University School of Medicine, Nashville, Tennessee

10:00 A.M.

Intermission to Visit Exhibits

10:30 A.M.

Subject: **"Management of Head Injuries"**

By: Guy L. Odom, M.D., Duke University School of Medicine, Durham, North Carolina

Subject: **"Orthopedic Injuries Requiring Immediate Treatment**

By: Lewis D. Anderson, M.D., Memphis

11:00 A.M.

Discussion and Questions

11:30 A.M.

Presentation by the President of the American Medical Association

Subject: **"Let's Lead Rather Than Be Led"**

By: Dwight L. Wilbur, M.D., San Francisco, California, President, American Medical Association

SPECIALTY SOCIETIES

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TENNESSEE STATE ORTHOPAEDIC SOCIETY

FRIDAY, APRIL 11, 1969

John Sevier Room **Gatlinburg Motor Lodge**

SCIENTIFIC PROGRAM

1:00 P.M.

"Correlation of Experimental Central Repair and Regeneration of Cartilage"

By: Rocco A. Calandruccio, M.D., Memphis

1:20 P.M.

"Vitamin D—Resistive Rickets"

By: Gary R. Chambers, M.D., Knoxville (by invitation)

1:40 P.M.

GUEST SPEAKER

H. R. Brashear, M.D.,

Professor of Orthopedic Surgery
University of North Carolina

"Epiphyseal Injuries"
Intermission—Visit Exhibits

3:00 P.M.

"Treatment of Hematogenous Osteomyelitis at Vanderbilt"

By: Arthur L. Brooks, M.D., Nashville, and Robert W. Lowe, M.D., Nashville (by invitation)

3:20 P.M.

"An Approval to Traction Injury of the Brachial Plexus in Adults"

By: Clarence Temple, M.D., Nashville (by invitation)

3:40 P.M.

"Greenstick Fractures in Children, A Method of Treatment"

By: Robert C. Coddington, M.D., Chattanooga

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TENNESSEE ACADEMY OF OPHTHALMOLOGY & OTOLARYNGOLOGY

FRIDAY, APRIL 11, 1969

Room B **Holiday Inn**

12:00 Noon

LUNCHEON AND PANEL DISCUSSION

Panelists: George W. Bounds, Jr., M.D., Nashville

John E. Campbell, Jr., M.D., Knoxville

David D. Donaldson, M.D., Boston, Mass.

1:15 P.M.

Business Meeting

OPHTHALMOLOGY SECTION

Room A **Holiday Inn**

SCIENTIFIC PROGRAM

1:55 P.M.

Meeting Called to Order

By: Dale Teague, M.D., Vice President

2:00 P.M.

"Treatment of Diabetic Retinopathy with Photocoagulation"

By: Thomas O. Wood, M.D., David Meyer, M.D., and Roger L. Hiatt, M.D., Memphis

2:20 P.M.

"Low Tension Glaucoma"

By: Roger L. Hiatt, M.D., Alice R. Deutsch, M.D., and Carl Ringer, M.D., Memphis

2:40 P.M.

GUEST SPEAKER

DAVID D. DONALDSON, M.D., BOSTON, MASS.

"Blow Out Fractures of the Orbit"

3:25 P.M.

Intermission—Visit Exhibits

3:40 P.M.

"Screening of the Young Child for Visual Defects in Tennessee County Health Departments"

By: John B. Bond, M.D., and
Robert H. Hutcheson, Jr., M.D., Nashville

4:00 P.M.

"Perceptual Problems as Related to Ophthalmology"

By: John Montgomery, Jr., M.D., Knoxville

4:20 P.M.

"Retinal Detachment Surgery: The Methods and Results of Diathermy and Cryosurgery"

By: Ralph S. Hamilton, M.D., Robert E. Hall, M.D., and Paul Stein, B.A., Memphis

4:40 P.M.

"The Comparison of Cryothermy and Diathermy Techniques and Results in Retinal Detachment Surgery"

By: Norman M. Sawyer, M.D., Johnson City

5:00 P.M.

Case Report—"Conjunctival Xanthofibroma"

By: John W. Wood, M.D., and
G. Allen Lawrence, M.D., Nashville

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OTOLARYNGOLOGY SECTION

Mural Room **Riverside Motor Lodge**

SCIENTIFIC PROGRAM

1:30 P.M.-2:00 P.M.

Visit Exhibits at Auditorium

2:15 P.M.

"Granular Cell Myoblastoma of the Upper Airway"

By: Kenneth Reed, M.D., and
Charles W. Gross, M.D., Memphis

2:35 P.M.

"Nose Reconstruction with Forehead Flap"
(Movie)

By: Perry Harris, M.D., Nashville

3:00 P.M.

"Pitfalls in the Diagnosis of Midline Granulomatoid Lesions"

By: John Hodges, M.D., and
Charles Gross, M.D., Memphis

3:25 P.M.

"Complications following Combined Therapy for Carcinoma of Larynx"

By: Daniel R. Hightower, M.D., Nashville

4:00 P.M.

"Juvenile Laryngeal Papillomatosis: A Method of Surgical Management"

By: Thermon Crocker, M.D., Memphis

TENNESSEE DIABETES ASSOCIATION

FRIDAY, APRIL 11, 1969

Gold Room **River Terrace Motel**

12:15 P.M.

LUNCHEON

(Members and Guests)
Gold Room—River Terrace Motel

SCIENTIFIC PROGRAM

(Members and Guests)
Gold Room—River Terrace Motel

1:00 P.M.

GUEST SPEAKER

Glen McDonald, M.D., Chief,
Diabetes & Arthritis Control Program
Department of Health, Education & Welfare
Washington, D. C.

"Screening for Diabetes"

2:00 P.M.

"Diabetic Neuropathy"

By: Bertram Sprofkin, M.D., Nashville

2:30 P.M.

Intermission—Visit Exhibits

3:00 P.M.

"Photocoagulation As It Relates to the Diabetic"

By: David Meyer, M.D., Memphis

3:30 P.M.

PANEL

"Office Management of Diabetes"

Moderator: Richard Wooten, M.D., Memphis
Panelists: Julian Lentz, Jr., M.D., Maryville
Carl Hartung, M.D., Chattanooga
Erle E. Wilkinson, M.D., Nashville

4:30 P.M.

BUSINESS SESSION

(Members Only)

TENNESSEE THORACIC SOCIETY

FRIDAY, APRIL 11, 1969

Lecture Hall **Gatlinburg Auditorium**

Joint Meeting with the

TENNESSEE CHAPTER—AMERICAN COLLEGE OF CHEST PHYSICIANS

1:00 P.M.

Business Meeting

SCIENTIFIC PROGRAM

1:30 P.M.

"Application of Morphology, Chemistry and Crystalography in Silicosis and Coal Workers Pneumoconiosis"

By: PHILLIP C. PRATT, M.D., Duke University Medical Center, Durham, N. C.

2:15 P.M.

(Discussion)

2:45 P.M.

"Management of Respiratory Problems in Infancy and Childhood"

By: WILLIAM D. LOGAN, JR., M.D., Emory University School of Medicine, Atlanta, Georgia

3:30 P.M.

(Discussion)

4:00 P.M.

Adjourn to Visit Exhibits

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TENNESSEE DISTRICT BRANCH—AMERICAN PSYCHIATRIC ASSOCIATION

FRIDAY, APRIL 11, 1969

12:00 Noon

LUNCHEON

Stephen Whaley Hall Riverside Motor Lodge

SCIENTIFIC PROGRAM

Stephen Whaley Hall Riverside Motor Lodge

1:00 P.M.

"Establishing a Therapeutic Community"

By: RICHARD G. FARMER, M.D., Department of Psychiatry, University of Tennessee College of Medicine, Memphis

"The Tuesday-Wednesday Club: An Experience with Lithium"

By: H. M. WEST, M.D., University of Tennessee College of Medicine, Memphis

"Drug Abuse"

By: JOHN H. WOLAVER, M.D., Knoxville

TENNESSEE ACADEMY OF PREVENTIVE MEDICINE AND PUBLIC HEALTH and TENNESSEE INDUSTRIAL MEDICAL ASSOCIATION

FRIDAY, APRIL 11, 1969

12:15 P.M.

COMBINED LUNCHEON WITH TENNESSEE DIABETES ASSOCIATION

Gold Room, River Terrace Motel

1:00 P.M.

Luncheon Speaker

VISIT EXHIBITORS

SCIENTIFIC PROGRAM

Espalier Room Riverside Motor Lodge

2:00 P.M.

"Effects of Lead on Protein Synthesis in Reticulocytes"

By: WALTER R. FARKAS, Ph.D., University of Tennessee Memorial Research Center & Hospital, Knoxville

2:30 P.M.

"Drug Abuse"

By: KENNETH CARPENTER, M.D., Knoxville Mental Health Center

3:00 P.M.

"Initial Detection of Malignant Disease by the Industrial Physician"

By: DAVID H. SEXTON, M.D., Oak Ridge National Laboratory

3:30 P.M.

(Intermission)

3:40 P.M.

BUSINESS SESSIONS

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TENNESSEE OBSTETRICAL AND GYNECOLOGICAL SOCIETY SPECIAL NOTICE

PROGRAM FOR OBSTETRICAL AND GYNECOLOGICAL NURSES

(Sponsored by: Tennessee Obstetrical and Gynecological Society, Tennessee Nurses Association, and University of Tennessee Memorial Research Hospital, Knoxville.)

FRIDAY, APRIL 11, 1969

Huff House Mountain View Hotel

The Tennessee Obstetrical and Gynecological

Society, the Tennessee Nurses Association and the University of Tennessee Memorial Research Hospital, Knoxville, are sponsoring a special one day program for obstetrical and gynecological nurses. The general program chairman is Dr. John Howe, Knoxville, Tennessee.

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WOMAN'S AUXILIARY TO THE TENNESSEE MEDICAL ASSOCIATION

FRIDAY, APRIL 11, 1969

Greystone-Howard Johnson Motor Lodge

PROGRAM

8:00 A.M.-4:30 P.M.

Registration

Lobby—Greystone Hotel

8:00 A.M.-9:30 A.M.

Pre-Convention Board Breakfast

Howard Johnson Restaurant
(adjoining the Greystone Hotel)

10:00 A.M.-12:30 P.M.

General Business Session

The Greystone Hotel Playhouse

12:30 P.M.-1:30 P.M.

LUNCHEON

Panoram Room—River Terrace Motel

2:00 P.M.-4:00 P.M.

General Business Session

The Greystone Hotel Playhouse

Special Committee Meetings

(Awards, Finance, Revisions)
President's Suite—4:00 P.M.

Arts and Crafts Exhibit and Hospitality Rooms

Main Floor—The Greystone Hotel

Silent Auction—Main Floor

The Greystone Hotel

Saturday, April 12, 1969

1:00 P.M.

House of Delegates

Auditorium

Gatlinburg

General Scientific Program

Auditorium **Gatlinburg**

Presiding: Edward T. Newell, Jr., M.D., Chattanooga, President, Tennessee Medical Association

OBSTETRICAL-GYNECOLOGICAL AND PEDIATRIC SYMPOSIUM

9:00 A.M.

Moderator: Stewart A. Fish, M.D., Chairman, Department of Obstetrics and Gynecology, University of Tennessee Medical School, Memphis, Tennessee

Subject: **"Erythroblastosis and Use of RhoGam"**

By: Everett M. Clayton, Jr., M.D., Associate Clinical Professor of Obstetrics and Gynecology, Vanderbilt University Medical School, Nashville, Tennessee

Subject: **"The Management of the Severely Affected Erythroblastotic Infant"**

By: Mildred T. Stahlman, M.D., Associate Professor of Pediatrics, Vanderbilt University School of Medicine, Nashville, Tennessee

Subject: **"Oral Contraceptives Medication"**

By: Douglas M. Haynes, M.D., Chairman, Department of Obstetrics and Gynecology, University of Louisville Medical School, Louisville, Kentucky

Subject: **Anovulation After the Use of the Pill"**

By: Donald A. Goss, M.D., Chairman, Department of Obstetrics and Gynecology, Vanderbilt University School of Medicine, Nashville, Tennessee

Subject: **"Menstrual Irregularity and Embolism Complications of the Use of the Pill"**

By: W. Powell Hutcherson, M.D., Chattanooga, Tennessee

Subject: **"Catastrophic Menorrhagia With Use of Pill"**

By: Glenn F. Watts, M.D., Knoxville, Tennessee

10:30 A.M.

Intermission to Visit Exhibits

11:00 A.M.

Subject: **"Medicaid Experiences"**

By: W. Scott Hendren, Jr., M.D., Oklahoma City, Oklahoma, President, Oklahoma State Medical Association

11:30 A.M.

Subject: **"Current Federal Medical Legislation and Techniques of the AMA Washington Office"**

By: Mr. James W. Foristel, Assistant Director, Department of Congressional Relations, AMA, Washington, D. C.

SPECIALTY SOCIETIES

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TENNESSEE RADIOLOGICAL SOCIETY

SATURDAY, APRIL 12, 1969

12:00 Noon

LUNCHEON

Dining Room—Gatlinburg Motor Lodge

SCIENTIFIC PROGRAM

Legion Room—Gatlinburg Auditorium

1:30 P.M.

"Recent Advances in Nuclear Medicine"

By: Edward V. Staab, M.D., Assistant Professor of Radiology, Vanderbilt University School of Medicine, Nashville

Adjourn—Visit Exhibits

Business Meeting

Sunday Morning—April 13
(Place to be announced)

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TENNESSEE STATE SOCIETY OF ANESTHESIOLOGISTS

SATURDAY, APRIL 12, 1969

Mural Room **Riverside Motor Lodge**

12:00 Noon

Luncheon

SCIENTIFIC PROGRAM

1:00 P.M.

Guest Speaker

Charles Allan, M.D.,
Chicago Children's Hospital

"Management of Fluids and Electrolytes in Pediatric Surgical Patient"

3:00 P.M.

Business Session

7:00 P.M.

Dining Room **Riverside Motor Lodge**

COCKTAIL HOUR

8:00 P.M.

DINNER-DANCE

* * *

TENNESSEE SOCIETY OF PATHOLOGISTS

SATURDAY, APRIL 12, 1969

Blue Room **River Terrace Motel**

12:00 Noon

Dutch Treat Luncheon

SCIENTIFIC PROGRAM

1:00 P.M.

"Chemodectoma of the Orbit"

By: Carl Thacker, M.D., and
John K. Duckworth, M.D., Memphis

1:15 P.M.

"Systemic Venous Endotheliosis in Infancy"

By: Marvin Meadors, M.D., and
W. W. Johnson, M.D., Memphis

1:30 P.M.

"Malacoplakia of the Testes: Electron Microscopy and Electron Diffraction Studies"

By: Robert C. Brown, M.D., Oak Ridge

1:45 P.M.

"Pathology in the Small Hospital Laboratory"

By: Maurice M. Acree, M.D., Union City

2:00 P.M.

"Massive Necroses of the Breast"

By: Benjamin F. Martin, M.D., and
J. D. Phillips, M.D., Memphis

2:15 P.M.

"Familial Multiple Polyposes of the Colon with Bilateral Fibromatosis of the Breast (Gardner's Syndrome?)"

By: Roger Haggitt, M.D., Memphis

2:30 P.M.

Intermission—Visit Exhibits

2:45 P.M.

"Rey's Syndrome, Clinical and Pathologic Features"

By: Bruce B. Bellomy, M.D., Knoxville

3:00 P.M.

"Childhood Leukemic Heart Disease, Clinical and Anatomical Study of 116 Hearts of Children Dying of Leukemia"

By: J. E. Sumners, W. W. Johnson, M.D., and
L. E. Ainger, M.D., Memphis

3:15 P.M.

"Bisalbuminemia"

By: Robert Baisden, M.D., Memphis

4:00 P.M.

Business Meeting

* * *

TENNESSEE PEDIATRIC SOCIETY

SATURDAY, APRIL 12, 1969

Auditorium **Gatlinburg**

SCIENTIFIC PROGRAM

The scientific program will be presented in cooperation with the Tennessee Obstetrical and Gynecological Society, which will be the same as the TMA general scientific program at 9:00 A.M. in the Auditorium. (See TMA general scientific program.) The program will run from 9:00 A.M. until 12:00 Noon.

BUSINESS MEETING

On completion of the luncheon, the Tennessee Pediatric Society will hold a brief business session in the Stephen Whaley Hall.

TENNESSEE OBSTETRICAL AND GYNECOLOGICAL SOCIETY

SATURDAY, APRIL 12, 1969

12:00 Noon

Luncheon

Stephen Whaley Hall—Riverside Motor Lodge

1:00 P.M.

Lecture Hall **Auditorium**

Business Meeting

2:00 P.M.

SCIENTIFIC PROGRAM

Moderator: J. Vivian Gibbs, M.D., President

"Removal of a Normal Ovary"

By: Jerry Johnson, M.D., Knoxville

2:20 P.M.

"Premature Rupture of Membranes"

By: Samuel Binder, M.D., Chattanooga

2:40 P.M.

"Chemotherapy in Trophoblastic Disease"

By: Donald Goss, M.D., Chairman, Department of Obstetrics and Gynecology, Vanderbilt University Hospital, Nashville

3:10 P.M.

"Pure Gonadal Dysgenesis"

By: Melvin K. Bottorff, M.D., and Arthur Fort, M.D., Memphis

3:30 P.M.

"Abruptio Placenta"

By: Douglas Haynes, M.D., Louisville, Kentucky

6:30 P.M.

COCKTAIL HOUR

Ski Lodge—Gatlinburg

(For members of the Tennessee Obstetrical and Gynecological Society, their guests and wives.)

7:45 P.M.

BANQUET AT SKI LODGE

* * *

WOMAN'S AUXILIARY TO THE TENNESSEE MEDICAL ASSOCIATION

SATURDAY, APRIL 12, 1969

Greystone Hotel and Howard Johnson Motor Lodge

Gatlinburg

PROGRAM

8:00 A.M.-12:00 Noon

Registration

Lobby—Greystone Hotel

8:30 A.M.-10:30 A.M.

Combined Boards Breakfast and Workshop

Presiding: Mrs. J. Ralph Rice

"Important that all retiring officers and incoming officers be present. Our National President-Elect, Mrs. John M. Chenault, will be present for consultation and suggestions for the coming year."

12:30 P.M.-2:00 P.M.

ANNUAL LUNCHEON

Honoring Past Presidents and National Officers

Installation of Officers

The Greystone Hotel Playhouse

3:00 P.M.-5:00 P.M.

Pick up articles from Arts and Crafts

Arts and Crafts Exhibit and Hospitality Rooms

Greystone Hotel

"Silent Auction"

Main Floor—Greystone Hotel

6:00 P.M.

TMA President's Social Hour

Gatlinburg Auditorium

7:00 P.M.

TMA BANQUET

Gatlinburg Auditorium

9:30 P.M.

D A N C E

Riverside Motor Lodge

President's Page



Dr. Newell

Physician Self Education

Besides assuming a personal interest and responsibility in the care of our patients, we physicians owe ourselves the duty of continuing our education for our own self advancement. This continued education should take two forms:

1. To have the curiosity and interest to participate in continued medical education. With the rapid advances in medical science, it is difficult but quite possible to stay abreast of the times. One of the projects of the TMA is to assume a Continuing Medical Educational Program before some state or federal re-examination regime is forced on all physicians. We are fortunate to have Dr. R. H. Kampmeier as Chairman of this committee. The broad policy of this committee is to bring medical education to the local community hospital level with participation by the local physicians in all educational programs somewhat in the manner of the medical school C.P.C. and other conferences. Participation by experts in certain fields will be made available from medical schools and other sources personally. Hopefully, closed circuit television will become available some day for this. Much of the cost of these programs probably can be assumed by liaison with the Regional Medical Programs as education is one of the chief concepts of the Federal R.M.P. It is the hope of the TMA that all physicians will not only take an interest in, but will participate in these educational programs when they become available.
2. Our second responsibility in self education is to become knowledgeable in the many new Federal laws pertaining to Health Care. To my knowledge, the Federal Prohibition Act is the only federal law of consequence which was repealed in 1933. For this reason, we must learn to live with and give leadership to implementing the many new federal laws passed in the 89th and 90th Congress. To serve on the many state and regional committees along with other providers of health care as well as consumer groups, we must develop a group of physicians at the local level who are not only knowledgeable leaders of medicine but are willing to serve as a community responsibility. Except for the majority of our local and state officers and committee chairmen, very few physicians have either read or attended conferences on Medicaid (P.L. 89-97); the Regional Medical Programs, (P.L. 89-239); the Comprehensive Health Planning Act (P.L. 89-749); the Partnership for Health Amendments (90-174). For any physicians interested in self education of our socio-economic problems may I suggest two good articles to read in the January issue of the Journal of the Tennessee Medical Association, "Changing Patterns of Health Care" by A. B. Scoville, M.D., President, Health and Hospital Planning Council, Nashville, Tennessee. The second article is a special item presented by request to HEW for referral to the proper committee in Congress entitled, "Statement of the TMA Relative to Medicaid (Title XIX) Program." This article, over my signature with the able assistance of Jack Ballentine and Hadley Williams, we hope expressed the view of the majority of physicians in Tennessee.

Sincerely,

Edward T. Newell Jr.

President

THE JOURNAL

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MARCH, 1969

EDITORIAL

TOWARD FIXED FEES?

Secretary of Health, Wilbur J. Cohen, levelled a final charge against the medical profession in his *Medicare Newsletter* of January 13 as he turned over the reins to incoming Secretary Robert Finch.

Admitting that an $8.00 annual per capital premium ($4.00 each from the client and the government) is barely adequate for the supplemental medical insurance, he set this fee for 1969 and through June 1970. In doing so he recalled that the original rate was $3.00 for each matching fund in 1965. He stated,

"Last year when the rate went up $1, each, about a third of the increase was needed to take account of the expected continuing rise in physicians' fees. And now this is again a crucial factor in determining the premium rate for the fiscal year 1970," (and) "The Chief Actuary of the Social Security Administration, Mr. Robert J. Myers, my friend and colleague of 34 years' standing, advises me that he believes that physicians' fees will rise about 5% in calendar year 1969 over 1968 and 4½% in 1970 over 1969 and that medical utilization under the program will increase about 2% in 1969 and 1½% in 1970."

And:

"Briefly, Medicare was enacted in the face of a price history that showed a great deal of stability in the relationship between physicians' fees and the prices for other items and wages. In the 5 years preceding Medicare enactment, the percentage changes annually of physicians' fees averaged 2.6 per cent as compared with 2.8 per cent for average hourly earnings of production workers and 1.2 per cent for the cost of living.

"In the period 1965-67 the average annual increase in physicians' fees was 7%. During this same period average hourly earnings have increased only 4.3 per cent and cost of living only 2.8 per cent. A very marked imbalance has developed between the rate at which physicians' fees have been escalating and the rates at which other indicators have been moving during these years. The American people are deeply concerned about this development.

"Moreover, and even more significantly, total physician net incomes have increased even faster than the increase in fees for particular services. Based on data from *Medical Economics,* median physicians' incomes increased 11 per cent in 1966 over 1965 and 8 per cent in 1967 over 1966. Physicians have not been economically disadvantaged by Medicare."

The implications of these odious comparisons are characteristic of the political bureaucrat—implications of dishonesty by physicians and a bleeding of government funds. Note the annual increase in physicians' incomes of 11 and 8% in 1966-67. Unfortunately at the moment of this editorial comment it is impossible to identify an honest evaluation of this matter which appeared in one of the country's "top" newspapers in New York City, a couple of years ago. If memory is to be trusted, facts were appraised in terms of the millions of dollars of medical services given to older patients either gratis or at reduced fees before Medicare. It would indeed have been a rare physician who refused an old patient, now retired, on social security benefits or in other straightened circumstances, medical attention. To cut off medical attention from an older and former patient by his former physician just was not done, with rare exceptions. Why should the income taxpaying doctor have continued to charge nothing, or less than the usual and customary fee when a third party steps into the picture! A smart Cohen knows this as well as any thoughtful and knowledgeable per-

son—an explanation for an anticipated increase in fees.

Also in the last month Cohen laid down new rules to carriers in paying doctors' bills. His letter states,

"Generally these guidelines are designed to obtain a greater degree of uniformity in the development of the customary charges of individual physicians as well as the level of prevailing charges in the carriers' respective areas, and they are also designed to specify uniformly longer periods of time in which an individual fee must be charged before it can be deemed to be established as the customary fee, as well as specifying a minimum period between the time that a fee is established as a prevailing one in the locality and the time when a change in that fee can be recognized. The expected effect of the immediate implementation of these additional guidelines will be to slow down the rate at which carriers introduce new and higher prices into their reasonable charge 'screens.' "

Thus, Wilbur Cohen, who helped draft the Social Security Act following his arrival in Washington in 1934, and who usually showed an antipathy to the medical profession, left HEW to the new Secretary, Robert Finch,—left it with last minute hobbles which will be difficult to strike off because of the political maneuvering which would be required of the new administration.

One cannot help but be reminded of the passage from Francis Bacon's essay of 400 years ago, *Of Truth,* "Doth any man doubt, that if there were taken out of men's minds vain opinions, flattering hopes, false valuations, imaginations as one would, and the like, but it would leave the minds of a number of men poor shrunken things, full of melancholy and indisposition, and unpleasing to themselves?"

R.H.K.

OFFICERS CONFERENCE—SPEAKERS, PANELISTS, STRESS PHYSICIAN LEADERSHIP

Leadership responsibilities of the physician were major concerns of speakers at the Tennessee Medical Association's State and County Medical Society Officers Leadership Conference, held in Nashville in November.

With the leaders of the medical profession throughout Tennessee assembled in Nashville, the Conference presented an excellent opportunity for physician leaders to become more aware of some of the pressing problems facing medicine today. The Conference included officers and delegates of the Tennessee Medical Association and Chairmen of its committees; principal officers of county medical societies; officers of the organized specialty societies in the state; representatives of the Woman's Auxiliary to TMA; officers of the Medical Assistants Society of Tennessee, and principal officers of the Tennessee Hospital Association.

"Leadership" was the theme of the Conference, presided over by TMA's President, Dr. Edward T. Newell, Jr., Chattanooga.

Senator Howard Baker, luncheon speaker for the Conference, stated that the new administration in Washington will bring about some startling new developments—not to the left of liberal. He said the new administration will have the courage to offer new solutions and "not a rehash of previous times." Furthermore he believes that the new policies and actions will have great social impact with the full utilization of the free enterprise system. Government, Senator Baker stated, would try to get industry involved in social changes. Government is a machine of the people, and the Senator thinks it will try to avoid "big brotherism." Emphasis will be on the individual with full utilization of the potential of free enterprise.

"The Challenge Ahead in Comprehensive Health Planning" was discussed by a panel of four qualified persons. The panel was composed of Dr. J. Robert Lindsay, Atlanta, Regional Medical Director for the Department of Health, Education, and Welfare; Dr. H. P. Hopkins, Nashville, Director of Health Services for the Tennessee Department of Public Health; Mr. Frank M. Norfleet, Memphis, Chairman of the Mid-South Medical Center Council for Comprehensive Health Planning, and Dr. Addison B. Scoville, Nashville, President of the Nashville Health and Hospital Planning Council. Dr. Alvin J. Ingram, Memphis, Secretary-Treasurer of the American Medical Association, was the moderator.

Dr. Ernest B. Howard, Chicago, acting Executive Vice President, American Medical Association, speaking on "Why We Need

to Be Leaders," described the close working relationship of the American Medical Association with President-Elect, Richard Nixon. He said that AMA had stated medicine's position on 25 major health issues. Dr. Howard emphasized the "insatiable demand for health care which exists," naming some of the factors that have brought this about, including the concept of health care as a right regardless of the financial ability to pay. He told the group that the medical industry is now the third largest in the United States, and that by 1975 it would be first in dollars and people involved.

Other speakers included Hugh W. Brenneman, Executive Director of the Michigan State Medical Society, East Lansing, Michigan, who presented the subject "Where We Stand."

"Patterns for the Future" was the subject of Mr. Morton D. Miller, Vice President and Chief Actuary of the Equitable Life Assurance Society of the U.S., New York. Mr. Miller's address was afterwards described as offering "highly useful economic data beneficial to physicians."

The final speaker was Dr. Blair J. Henningsgaard, Astoria, Oregon, whose subject was "Political Action and the Physician." Dr. Henninsgaard stressed the outstanding part being played by physicians and the emergence of the political action committees on the state level and of AMPAC on the national level. Dr. Henningsgaard is Chairman of the Board of Directors of AMPAC.

The Conference was attended by 187 physicians and guests who were most enthusiastic of a very informative program. The readers of the Journal have had the opportunity of reviewing the thoughts of the speakers as published in the January and February issues.

JACK BALLENTINE
Executive Director

IN MEMORIAM

Ray, Thomas Ryell, Shelbyville. Died February 12, 1969, Age 88. Graduate of University of Louisville School of Medicine, 1907. Member of Bedford County Medical Society.

Luna, Louis E., Parsons. Died January 10, 1969, Age 63. Graduate of University of Tennessee College of Medicine, 1929. Former member of Hickman-Perry County Medical Society.

Robertson, Robert Crawford, Chattanooga. Died January 15, 1969, Age 70. Graduate of University of Illinois College of Medicine, 1925. Member of Chattanooga-Hamilton County Medical Society.

Burkhalter, W. D., Memphis. Died January 22, 1969, Age 58. Graduate of Vanderbilt University School of Medicine, 1934. Member of Memphis-Shelby County Medical Society.

Johnson, Halvern H., Memphis. Died January 28, 1969, Age 60. Graduate of Howard University College of Medicine, 1937. Member of Memphis-Shelby County Medical Society.

PROGRAMS AND NEWS OF MEDICAL SOCIETIES



New Members

The Journal takes the opportunity to welcome these new Tennessee Medical Association members.

BLOUNT COUNTY MEDICAL SOCIETY
H. S. Nelson, M.D., Maryville

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY
M. Sue Clark Cox, M.D., Chattanooga

NASHVILLE ACADEMY OF MEDICINE
Richard A. Ewing, III, M.D., Nashville
Rufus Jack Freeman, M.D., Nashville
Walter G. Gobbel, Jr., M.D., Nashville
Andrew S. Wachtel, M.D., Nashville
Robert G. Wheeler, M.D., Old Hickory

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY
Charles E. Kossmann, M.D., Memphis
Leslie B. Reynolds, Jr., M.D., Memphis

OVERTON COUNTY MEDICAL SOCIETY
Donald K. Johnston, M.D., Byrdstown

Memphis-Shelby County Medical Society

The Society met in regular session in the auditorium of the Institute of Pathology,

University of Tennessee, on Tuesday, February 4. The program was entitled "Medicaid in Tennessee." Following introductory remarks by Dr. Francis H. Cole, president-elect of the Tennessee Medical Association, Dr. R. H. Hutcheson, Commissioner of Public Health, discussed plans for implementation of the program; and Mr. Harlan Matthews, Commissioner of Finance, spoke on "Fiscal Implication."

A session of the House of Delegates of the Society followed the program at 8:00 P.M.

Knoxville Academy of Medicine

The program for the meeting of the Academy on February 11th, was a panel on the subject "Facts About Hospital Costs." Members of the panel consisted of the administrators of the five Knoxville hospitals who gave a slide presentation with narrative discussion, followed by a question and answer period.

Resolutions for Annual Session

It should be kept in mind that resolutions emanating from the County Medical Societies for consideration by the House of Delegates of the Tennessee Medical Association at its scheduled annual session should be submitted on or before April 1, in order to be set forth in the agenda of resolutions and reports distributed to the Delegates. The sooner that such resolutions are submitted, however, the better the Headquarters Office of TMA will be enabled to meet the timetable of scheduled productions.

NATIONAL NEWS

A Federal Communications Commission proposal to ban cigarette advertising on radio and television put the issue squarely before Congress again. In 1965, Congress outlawed any federal or state controls on cigarette ads as a provision of the legislation that made mandatory that cigarette packages carry the warning: "Caution: Cigarette Smoking May Be Hazardous to Your Health." Proponents of the electronic advertising ban contend that the package warning doesn't make enough impact.

Even before the FCC announcement, some members of Congress were saying that the provision outlawing federal and state controls over cigarette advertising should be allowed to expire on June 3. However, congressional reaction to the FCC ruling was mixed.

The American Medical Association House of Delegates, at its meeting in Miami Beach last December, declined to approve a resolution condemning cigarette advertising on TV. Instead, it adopted a resolution urging that AMA members "play a major role against cigarette smoking by personal example and by advice regarding the health hazards of smoking." The adopted resolution also made it Association policy that the AMA "discourage smoking by means of public announcements and educational programs" and "take a strong stand against smoking by every means at its command."

Anticipating censorship charges—which came promptly from the tobacco and broadcasting industries, and some members of Congress, the FCC said in announcing its proposal: "We believe that in the case of such a threat to public health, the authority to act is really a duty to act. We stress again that our action is limited to the unique situation and product; that we are unaware of any other product commercials calling for such action, and expressly disclaim any intention to so proceed against other product commercials."

★

A nationwide increase in deaths from pneumonia was attributable to the Hong Kong flu epidemic, the federal government reported. "Pneumonia-influenza deaths increased over what was expected normally over the time the flu epidemic was active, Public Health Service Surgeon General Dr. William H. Stewart said, aiding the deaths included all kinds of pneumonia and that the increase was almost universal across the country."

The National Communicable Disease Center in Atlanta said pneumonia-influenza deaths are one measurement of the severity of a flu epidemic. Reports from 122 cities during the eight weeks ended February 1 show 5,270 more pneumonia-influenza deaths than the number normally predictable during that period. The epidemic then

was "on a downtrend," according to the CDC.

★

Robert H. Finch, the new secretary of Health, Education and Welfare, is giving health care costs a high priority in tackling the department's problems. Even before he was sworn in as secretary, Finch made an unannounced call on chairman Wilbur D. Mills (D., Ark.) of the House Ways and Means Committee, which has jurisdiction over HEW's medicare and medicaid programs. Finch afterwards said his staff would confer with Mills' staff to consider legislation or regulations that could combat higher health care costs.

"His staff and my people are going into this to see what we can do about the skyrocketing costs—especially hospitalization where 70 percent of the costs are labor," Finch said.

The former California lieutenant governor said he was thinking about the pilot program in his native state—which he called a para-medical program—whereby long stays in the hospitals are shortened by putting people in intensive care centers. If hospital stays could be shortened, he said, "massive savings would result."

Mills was reported as favoring broadened medicare benefits or hospital care to cover disabled workers, who, by nature of their disabilities, receive Social Security payments—but because they are under 65—are ineligible for medicare. He also was reported to be concerned over increases in hospital charges and doctors' fees.

Several members of Congress have expressed concern over increases in the federal costs of medicare and medicaid. The Johnson Administration's budget for fiscal 1970, starting next July 1, allots $6.9 billion, up $636 million, for medicare and $3 billion, up $600 million, for medicaid.

A bill, introduced by Sen. George Aiken (R., Vt.), with Senate Majority leader Mike Mansfield (Mont.) and Sen. Winston Prouty (R., Vt.), as co-authors, would do away with the present "usual and customary charge concept," place all physicians on assignment, and reimburse them through the average payment for the same service provided by the local Blue Shield. Deductibles and co-insurance would be eliminated, among many other changes.

The Labor Department reported that medical costs, including both hospitalization and physicians' fees, rose 7.3 percent for the calendar year 1968.

Finch said the Nixon Administration's HEW budget requests would be about the same size as the $17.5 billion submitted by the Johnson administration, but that there would be changes within the overall total. Estimated total federal spending in the health field will rise to $18.3 billion.

HEW said that national spending for health care, both government and private, continued to rise in fiscal 1968. The total for 1968 was $53.1 billion, $33.7 billion private and $19.4 billion government. This compared with $47.9 billion ($32.2 billion private and $15.7 government) for fiscal 1967. In fiscal 1960, it was $26.4 billion—$20 billion private and $6.4 billion government.

★

The Defense Department will call up 437 physicians, 23 osteopaths and 25 optometrists in 1969 in the lowest doctors draft in seven years. The total of 485 medical men compared with 1,126 drafted in 1968, 2,329 in 1967, 2,596 in 1966 and 2,830 in 1965.

The stabilization of the buildup of forces associated with the Viet Nam war and with a large number of volunteers made it possible to keep the doctors draft low, the Pentagon said. All of the physicians will go into the Army. Some of the osteopaths and optometrists will go into other services. None will go into uniform until July.

MEDICAL NEWS IN TENNESSEE

University of Tennessee College of Medicine

The Third Distinguished Lecturer Series, sponsored by the Graduate School—Medical Sciences at the University of Tennessee Medical Units, began February 5th. Speakers for the series in February and March included: Dr. Harold Copp, University of British Columbia; Dr. Abraham

White, Albert Einstein College of Medicine; Dr. Elwood V. Jensen, University of Chicago: Dr. Rachmiel Levine, New York Medical College; Dr. Martin Sonenberg, Sloan-Kettering Institute for Cancer Research; Dr. Earl Frieden, Florida State University; and Dr. Charles D. Kochakian, University of Alabama Medical Center.

★

Dr. Harwell Wilson, professor and chairman of surgery, has been appointed to the Conference Committee on Graduate Education in Surgery, representing the American Board of Surgery, the American College of Surgeons and the AMA's Committee on Education. The committee has the responsibility of reviewing and passing on surgical training programs.

★

Dr. James H. Price, clinical assistant professor of anesthesiology, was elected president of the Memphis and Shelby County Society of Anesthesiologists at the society's recent business meeting. Dr. James A. Heaton, instructor in anesthesiology, will serve as the society's secretary.

★

Participating Faculty—Dr. Sergio de Lamerens, assistant professor and chief of pediatric hematology, by invitation from the Venezuelan Pediatric Society, gave a series of lectures at the third National Pediatric Congress, held in Caracas and Maracaibo, Venezuela, February 4-9. . . . Dr. J. H. Garcia, associate professor of pathology and neurology, presented a seminar on "The Effects of Chronic Methanol Poisoning on Primates" recently at the Colorado General Hospital. The lecture was sponsored by the Department of Pathology of the University of Colorado Medical Center, Denver. . . . Dr. William C. North, professor and chairman of anesthesiology, recently served as Visiting Professor of Anesthesiology at the University of Mississippi, Jackson.

Vanderbilt University School of Medicine

Inherited anemic conditions that sometimes appear at birth but often remain unknown until activated by drugs or the aging process will be studied at the Vanderbilt Medical Center under a grant from The John A. Hartford Foundation, Inc., of New York City.

An award of $194,849 for a period of three years has been announced by the Foundation's President, Ralph W. Burger, and Dr. Randolph Batson, the University's Director of Medical Affairs. Dr. Jan van Eys, associate professor of biochemistry and assistant professor of pediatrics, will be the chief investigator for the project.

This is the fourth major medical research project in which The Hartford Foundation has cooperated with the Vanderbilt Medical Center. The John A. Hartford Foundation has donated over $100 million to medical research since the Foundation was established in 1954.

Funds for New Medical Centers Approved

Almost $1.3 million in federal grants for construction of two new medical facilities in North Nashville were approved January 30 by the State Hospital Advisory Committee. The applications for funds, approved by the Committee under the Hill-Burton program included $715,000 for a new 50-bed facility to replace the present Riverside Hospital and $551,232 to construct a comprehensive health service center at Meharry Medical College.

In approving construction projects totaling $7,775,041—the allotment available to the state this year—the committee rejected several requests. Applications for construction funds totaling more than $58 million came from 37 hospitals over the state and included nine requests of more than $1 million each.

Funds available included $3.5 million for general hospitals and public health facilities, $1.9 million for long-term care facilities, $1.4 million for modernization of existing facilities, $551,232 for diagnostic and treatment centers, and $275,694 for rehabilitation facilities.

Hospitals Elect New Chiefs of Staff

The medical staff of St. Joseph Hospital, Memphis, re-elected Dr. Harold Feinstein for an additional three-year term as chief of the staff. Dr. Harry Davis was also elected

to a three-year term as chairman of the department of medicine.

★

Officers of the medical staff at St. Thomas Hospital, Nashville, in 1968 are: Dr. Edwin L. Williams, president; Dr. Robert Roy, president-elect; and Dr. Fred Rowe, secretary.

★

Dr. Richard L. Hobart, Knoxville, has been elected chief of staff at St. Mary's Hospital to succeed Dr. Travis Morgan. Dr. Hubert Hill is the new chief of staff-elect and will become chief of staff in December. Dr. John Whittington is the new secretary.

★

Dr. Battle Malone, II, Memphis, is the new chief of the medical staff of Methodist Hospital, succeeding Dr. Samuel L. Raines. President-elect is Dr. N. W. Kuykendall, Jr. Dr. William H. Morse has assumed the presidency succeeding Dr. Charles L. Clarke. Other new officers are Dr. John K. Duckworth, vice-president, and Dr. Ralph Monger, Jr., secretary.

Dr. Robert D. Adams and Dr. George A. Fiedler, Jr. were selected by the staff for the 1968 Outstanding Intern Award, based on work, attitude and medical knowledge.

★

Dr. David Dodd has been elected chief of staff at the Rutherford Hospital. Other officers are Dr. Francis M. Fesmire, Vice-chief of staff and Dr. James Garrison, secretary.

Robert M. Windham Joins TMA Staff



Mr. Robert M. (Mike) Windham joined the TMA staff on February 20th, it has been announced by J. E. Ballentine, Executive Director of TMA. He will serve as Administrative Assistant and Field Representative, replacing Rodney Taylor who resigned in November, 1968.

A native of Wichita Falls, Texas, Mr. Windham was born on December 6, 1940. He attended Midwestern University at Wichita Falls, Texas and received a B.B.A. degree in Business Administration from Texas Christian University at Fort Worth. He did postgraduate training at North Texas State University, Denton, Texas.

Mr. Windham served as assistant administrator of the Physicians and Surgeons Clinic in Dallas, Texas; Administrator of the Northeast Medical and Surgical Clinic in Fort Worth, Texas, and for two years was associated with Blue Cross-Blue Shield at Dallas, serving as supervisor in the medical department where his responsibilities were working with two federal programs (Medicare) Title XVIII and XIX (Medicaid), and over-utilization.

Since May 1, Mr. Windham has been an administrative assistant in the Washington office of the American Medical Association, responsible for administrative functions of the AMA Washington office, representing the AMA on various conferences, councils and conventions.

Mr. Windham will be responsible for special and committee assignments, field representative to the county medical societies, IMPACT and legislative activities with TMA.

He is married and has two children, ages 6 years, and 10 months. He resides with his wife and family in the Valley Ridge Apartments in Nashville.

PERSONAL NEWS

Dr. Brett B. Gutsche, Department of Anesthesiology, University of Tennessee, Memphis, has been awarded a Certificate of Humanitarian Service by the American Medical Association for his service in Viet Nam with the AMA Volunteer Physician Program.

Dr. Charles C. Trabue, IV, has recently retired from the private practice of surgery to accept a position as Middle Tennessee Coordinator for the Tennessee Mid-South Regional Medical Program. His office is in the Baker Building at 110 21st Avenue, South, Nashville.

Dr. Robert M. Ruch, Memphis, has been named Chairman of the Section on Gynecology of the Southern Medical Association. **Dr. Ralph S. Hamilton,** Memphis, was named Chairman-Elect of the Section on Ophthalmology; **Dr. Charles E. Wells,** Nashville, Secretary of the Section on Neurology; and **Dr. Lloyd V. Crawford,** Memphis, Secretary-Elect of the Section on Allergy. These officers will be responsible for arranging the program for the respective sections for the 63rd an-

nual meeting of the Southern Medical Association, which will be held in Atlanta, Georgia, November 10-13.

Dr. Charles C. Smeltzer, Knoxville, Member of the AMA Liaison Committee to the American Bar Association, moderated a panel discussion during the national medicolegal symposium, March 13-15, in Las Vegas. The symposium was jointly sponsored by the American Medical Association and the American Bar Association.

Dr. S. Benjamin Fowler, chief of staff at Baptist Hospital, Nashville, has been installed as president of the American Academy of Orthopedic Surgeons. He succeeds Dr. Charles H. Herndon, Cleveland, Ohio, who headed the 4,000-member organization in 1968.

Dr. James O. Stewart, Nashville, will be installed as a Fellow of The American College of Obstetricians and Gynecologists at its annual meeting, April 28-May 1, in Bal Harbour, Florida.

Dr. James M. High, Nashville, served as head of the doctors division of the February Heart Fund Campaign.

The following University of Tennessee Medical Units faculty were elected Fellows of the American College of Surgeons at a recent meeting: **Dr. Dee J. Canale,** clinical instructor in neurology; **Dr. Hugh A. Clarke,** clinical instructor in neurology; **Dr. William Lloyd Duncan,** clinical assistant professor of surgery; **Dr. Irvin D. Fleming,** clinical instructor in surgery; **Dr. O. Brewster Harrington,** clinical instructor in thoracic surgery; **Dr. Sam P. Patterson,** associate professor of obstetrics and gynecology; **Dr. William T. Satterfield, Jr.,** clinical assistant in surgery; and **Dr. Leonard D. Wright, Jr.,** clinical assistant in otolaryngology.

Dr. Cleo Miller, Nashville, was elected chairman of the Board of the Federation of American Hospitals at the national convention recently in Dallas. **Dr. Joseph J. Dodds,** Chattanooga, was named vice-president of the organization.

Dr. James Price has been elected president of the Memphis and Shelby County Society of Anesthesiologists. Other officers are **Dr. Leslie E. Eason,** vice-president; **Dr. James A. Heaton,** secretary; and **Dr. W. Heymoore Schettler,** treasurer.

Dr. Hal Henard of Greeneville was presented the "Tennessee School Board's Distinguished Service Award" at a banquet highlighting the annual meeting of that body in Nashville on January 9th.

Dr. John L. Farringer, Nashville, has been named vice-president of the Tennessee Hospital Education and Research Foundation. Dr. Farringer also serves as TMA's representative to the Foundation.

The American College of Radiology elevated 119 members to Fellowship at the 1969 annual convocation, February 21 in Atlanta. Tennessee physicians honored with the degree were: **Drs. James L. Booth, Boyer M. Brady, Jr., Allan E. Green, Jr., Hollis H. Halford, Jr., Willard J. Howland, Jr., William E. Long, William R. Mitchum,** Memphis; and **Dr. William A. Nelson,** Knoxville.

A new health center and nursing home in Fentress County has been dedicated to **Dr. Guy C. Pinckley,** Jamestown. A plaque unveiled during dedication ceremonies read: "Dedication to Dr. Guy C. Pinckley who has served faithfully and continuously since 1949 as Chairman of the Board of Health of Fentress County, who through his service as a practicing physician and as board chairman contributed greatly to the public health of the citizens of his county, who has given freely of his wisdom, guidance and support to programs and personnel of the Fentress County Health Department, this building is dedicated with deep appreciation."

Dr. Ralph Brickell of Tullahoma has been elected county medical examiner on the nomination of Coffee County Medical Society. He succeeds Dr. Edwin E. Gray of Tullahoma.

Dr. R. H. Kampmeier, Nashville, gave the Malcolm C. Grow Memorial Lecture on "Continuing Medical Education—Historical Perspectives" at the annual meeting of the American College of Physicians Air Force Region and the Society of Air Force Physicians at Biloxi, Feb. 7. Major General Grow was the first Surgeon-General of the Air Force Medical Corps (1949).

ANNOUNCEMENTS

Calendar of Meetings, 1969

State

April 10-12	Tennessee Medical Association Annual Meeting, Civic Auditorium, Gatlinburg
May 15	Middle Tennessee Medical Association, Springfield
May 21-23	Mid-South Medical Association (Formerly Mid-South Post-Graduate Medical Assembly), Memphis

National

March 28-29	American Otological Society, Roosevelt Hotel, New Orleans
March 31-April 2	American Association for Thoracic Surgery, Fairmont Hotel, San Francisco
April 13-17	American Association of Neurological Surgeons, Sheraton Cleveland Hotel, Cleveland
April 17-22	American Dermatological Association, Marriott's Camelback Inn, Scottsdale, Arizona
April 18-20	American Society of Internal Medicine, Palmer House, Chicago
April 20-25	American College of Physicians, Conrad Hilton, Chicago
April 21-23	American Academy of Pediatrics, (Boston Children's Hospital Centennial), Boston

May 3	American College of Psychiatrists, Bal Harbour, Florida
May 5-7	American Gynecological Society, Royal Orleans Hotel, New Orleans
May 5-9	American Psychiatric Association, Americana Hotel, Miami Beach, Florida
May 6-7	Association of American Physicians, Haddon Hall, Atlantic City, N. J.
May 7-9	American Association of Genitourinary Surgeons, Del Monte Lodge, Pebble Beach, Calif.
May 12-14	American Society for Gastrointestinal Endoscopy, Shoreham Hotel, Washington, D.C.
May 12-15	American Urological Association, Hilton Hotel, San Francisco

New York City Is Site Of AMA's 1969 Annual Convention

New York City is the site of the American Medical Association's 118th Annual Convention, July 13 through 17. The nation's largest city has been host to two AMA annual conventions in this decade—in 1961 and 1965—and attendance at each exceeded 60,000. A total registration of 60,000 is predicted for 1969, including some 22,500 physicians. Medical students, nurses and other members of allied medical professions, industrial exhibitors, and guests make up the rest of the registrants.

An abundance of valuable information will be presented in a variety of interesting ways to those attending the '69 Convention. Four general scientific meetings are offered, as well as 23 section programs (with the Section on Special Topics offering six sessions), breakfast roundtables and fireside conferences. Additional postgraduate education is available through the exhibits, medical motion pictures and scientific television presentations.

Much of the scientific activity will be in the Coliseum and New York Hilton Hotel. The House of Delegates will meet at the Americana Hotel. In addition to papers and lectures which will be presented in the Coliseum and New York Hilton, there will be exhibits, color closed circuit television, and medical motion pictures. Some 250 to 300 scientific exhibits are expected at the Coliseum, including special ones on arthritis, pulmonary function, fresh tissue pathology, fractures, resuscitation, and laboratory medicine. Industrial exhibits also will be on view at the Coliseum.

The May 26 issue of The JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION will list the entire scientific program.

Continuing Education Courses, College of Medicine, University of Kentucky

The following continuing education courses will be offered by the College of Medicine, University of Kentucky in April and May:

"Practical Exercises in Neurology, Neurosurgery and Neuro-ophthalmology," Dr. Horace Norrell—April 18-19.

"A Seminar on Laboratory Management," Dr. John Koepke—April 25-26.

"Current Concepts in Bone and Joint Disease," Dr. Harold Rosenbaum—April 29-May 5.

"Cytopathology of Uterine Cancer with Clinical and Histological Correlation," Dr. Duane Tweeddale—May 2-3.

"Pneumoconioses," Dr. Richard O'Neill—May 13-15.

"Perinatal Symposium," Dr. Robert Beargie—May 28-29.

For additional information, contact Dr. Frank R. Lemon, Associate Dean, Continuing Education, College of Medicine, University of Kentucky, Lexington, 40506.

American Heart Association

Representatives of the American Heart Association have announced that abstracts of papers and applications for scientific exhibits and films to be considered for presentation at the AHA's 1969 Scientific Sessions must be postmarked no later than June 6, 1969. The meeting will be held November 13-16 in Dallas.

Call For Abstracts For ASA Annual Meeting

An open invitation to members of the American Society of Anesthesiologists to submit abstracts of papers for the scientific sessions at the 1969 annual meeting has been announced. The 1969 ASA meeting will be held October 25-29 at the San Francisco Hilton in San Francisco, California. June 1, 1969 is the deadline for submission of abstracts. Six copies of all abstracts should be submitted and run from 250 to 500 words in length. The following information must be included: 1. Title of paper. 2. Names of authors. 3. Name and complete address of institution. 4. Name of author who will present the paper. 5. A statement indicating that the work has not been presented or published before the 1969 meeting and that it will not appear in another form at the meeting. All abstracts should be sent to: Harry Wollman, M.D., Chairman, Committee on Scientific Program, 430 Righter's Mill Road, Penn Valley, Narberth, Pa. 19072.

Symposium on Rheumatic Diseases

The Fifth Annual Rheumatic Disease Symposium, jointly sponsored by the University of

Louisville School of Medicine and the Kentucky Chapter of the Arthritis Foundation, will be held on April 10, 1969. The full day conference will have as its theme, "What's New" in Rheumatic Diseases. The meeting will be held in the Rankin Amphitheater, Louisville General Hospital, University of Louisville Medical Center.

Guest faculty, all nationally known authorities and investigators, will include: A. J. Bollet, M.D., chairman, Department of Medicine, Medical College of Georgia; John J. Calabro, M.D., Associate Professor of Medicine, University of California at Los Angeles, School of Medicine; George E. Ehrlich, M.D., Director of Rheumatology, Temple University, Philadelphia; J. William Hollingsworth, M.D., Chairman, Department of Medicine, University of Kentucky College of Medicine; Roland W. Moskowitz, M.D., Case Western Reserve University; Howard F. Polley, M.D., Professor of Medicine, Mayo Graduate School of Medicine; and Robert L. Preston, M.D., Clinical Professor of Orthopedic Surgery, New York University School of Medicine.

The conference will emphasize specific topics of current interest including recent advances in diagnosis and treatment of rheumatoid arthritis in both the adult and child, osteo-arthritis, crystal induced synovitis, special forms of periodic arthritis and new surgical approaches to arthritis. Panel discussions with audience participation will be encouraged.

There is no registration fee. Further information and a program are available through Symposium Program Committee, Kentucky Arthritis Foundation, 209 Speed Building, Louisville, Kentucky, 40202.

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"Thy Staff"

The State Medical Society runs so smoothly for such long stretches of time that many physicians are infrequently conscious of its existence. This is certainly a great saving of time and effort and a real tribute to the officers, committees, and staff. But it also presents an occasional disadvantage.

For example, in the wake of the recent legislative debacle in Pennsylvania which authorized the payment of chiropractors by Medicaid (Title XIX) many physicians were outraged at the failure of their state society to prevent the passage of the legislation which permits the tragic blunder.

These members were, in varying degrees, confounded when shown how often and how hard their state organization had tried to secure individual or county society action to defeat this measure. Some participation by the member physician is essential—one cannot rely entirely on his state office.

To return to our statement in praise of the organization and workings of the state medical society, let us examine a main source of its efficiency and accomplishments —the men who make up the staff. Their skills and efforts are most clearly valuable in freeing the doctor from innumerable routine duties. Their skilled services make it possible for the many physicians in the state organization to carry out their own functions effectively. Without the sustained and expert attention of our staff personnel, the majority of our scheduled tasks and functions might be omitted or long delayed. Without the guidance of these staff specialists most of the physicians' work would be far more difficult, far less effective, and very often abandoned.

One major qualification which makes the staff so valuable should not surprise the doctor—its professionalism. Members of the staff are carrying out programs and projects for which they are prepared by training and experience. They are full-time people in two senses. First, this is their only occupation; they are not turning from some other devotion to give a few moments to the problems of our medical organization. Secondly, they are full-time in continuity; they continue their work through more than a term in office and from year to year. Moreover, their jobs are not only full-time, but also their primary occupations, calling out their first and best efforts.

To their work they bring one other qualification of the professional. They are not likely to be swayed by the emotional involvement of the membership, but can bring to their tasks the cool detachment which professional skills confer. The continuing productiveness of these qualities is well seen in our veteran staff as one of our greatest assets—their experience. There is no substitute for years of work in the society's office.

When it is time to praise them, the virtues named above are less often cited than the more popular virtues of concern and dedication. This cannot be faulted. It is a wonderful thing to realize the degree of concern which our staff shows in attending to our affairs. That worn-out word "dedication" does apply to them. They take their work and our problems home. Everybody knows that the five-day work week is not for the man who serves one of our committees. The doctor can find no better time for his meeting than Sunday, unless it be Saturday night. I have often heard physicians express wonder at such dedication. Let us be grateful and admit that it is not easy to explain.

Another benefit from the work of the men and women at the state office arises from their ability to interrelate with similar workers. This is most readily visible when a staff executive assists in our deliberations by telling of actions by other components of organized medicine. It is, however, more importantly realized in the complex but fruitful interactions between the staffs of medical societies and those of the many non-medical associations and groups with whom we must work. As medicine becomes more active in the devious progress

of our civilization, this becomes more obvious and more valuable.

I say that there is a need for every physician to understand and appreciate the function and procedures of his state medical society just as he needs to realize its importance. As a part of this comprehension he must see the value to him of the work of the executive staff and of the staff assistants. These people are, as I have here indicated, a special breed, and richly deserve our commendation and appreciation. Our own contribution of skills, time and effort is indispensable but we must understand that the staff, by means of expertise, concern and dedication, multiply its effect to a high degree.

From *Pennsylvania Medicine,* December, 1968

Pharmaceutical Manufacturers Offer Reply to HEW Findings in Rx Drug Study

In a wide-ranging critique, the Pharmaceutical Manufacturers Association says the Second Interim Report of the HEW Task Force on Prescription Drugs has "contributed to confusion rather than enlightenment . . . by ranging too far afield from its main assignment."

PMA President C. Joseph Stetler charged that the Task Force relied "too heavily on secondhand, politically inspired sources of information as the . . . carefully selected witnesses before the Subcommittee hearings of Senator Kefauver and Senator Nelson."

The extensive PMA critique was recently submitted to Wilbur Cohen, Secretary of HEW.

In his covering letter, Stetler acknowledged the difficulty of the Task Force because of the "broad scope" of the subject and the "many divergent views held by the various individuals and groups concerned."

The Association strongly disagreed, however, with most of the conclusions reached by the Task Force, especially those dealing with drug prices, industry profits, promotion and marketing, research, patents, competition, and clinical equivalency.

On the other hand, PMA praised "the important and possibly original contributions" made by the Task Force survey of the health needs of the elderly.

"We have all been aware that this is a serious social problem involving grave hardship on people with limited income," the critique stated. "The industry is interested in exploring with other groups and government ways to meet this problem."

Some of th PMA comments from the covering letter and complete critique follow:

On Retail Prices

The Report cites "independent surveys" as "indices" for increases in drug prices. The PMA points out that these surveys, while indicating that the average expenditure per prescription has been increasing at a pace less than the general cost of living, this factor "is neither an appropriate scientific basis for comparison, nor is it identical with prices . . . and even less relevant to manufacturers' prices."

The critique explained how Bureau of Labor Statistics "market basket" sampling and methods are valid and reflect the current selection of drugs.

On Generic vs. Brand Name Prices

The Task Force study described an average price of $2.02 for 30 generically prescribed products as against $4.11 for brand name products. The PMA questions whether this study has any meaning, since entirely different products were included in these averages, with the generic list consisting of older, less expensive products "whether prescribed by generic or brand names."

On Clinical Equivalency

"The Task Force should have explained that no two drug products are ever available from different manufacturers in identical dosage forms."

"Effects of formulation . . . cannot be separated from clinical effectiveness. Problems of formulation are extremely significant to the final clinical activity of a drug product. . . ."

"Most of the so-called 'chemical equivalents' purchased by leading American hospitals, the VA, the PHS, and the DOD are

brand name products . . . from PMA member firms."

"There are no official standards for many very critical factors which affect clinical activity . . . and they cannot be used to determine quality. . . ."

"Assurance of drug quality depends upon the integrity and capability of the manufacturer. . . ."

On Research

"The Report shows a complete lack of understanding of the relative expenditures of funds and energies on various aspects of research . . . and of research competition."

"Except for the most successful products . . . without allowance for the funding of unsuccessful research, the estimate is not accurate." (This referred to the Report's assumption that a company will usually recoup its R&D costs three years after a product reaches the market.)

On Molecular Modification

"So-called molecular modifications have frequently achieved important advantages in increased effectiveness, potency, or reduced side effects."

On Combination Products

Contrary to assumptions in the Report, the PMA critique asserts that such products are generally less expensive than individual product elements taken separately, may provide therapeutic advantages, and certainly require less research than does the quest for single entity products.

On Marketing Expenditures

Here the PMA explains the fallacious figure of $600,000,000 (and the alleged $3,000 per doctor figure) that has frequently been cited as the cost of "promotion" annually. "Even if one were to accept this figure (which is actually closer to that for *all* expenses of distribution) as an estimate for the 100 companies engaged in an extensive range of marketing activities, it would result in an expenditure per company per doctor, dentist, and pharmacist of only $16 annually for both promotional and non-promotional activities. . . ."

On Profits

"In discussing profit differential, the Report completely ignores any other industry explanation except risk. It makes no mention of the correlation among industries between rates of return on investment and two other variables besides risk, namely, the rate of annual growth on product demand and the rate of research intensity. . . ."

On Competition

"The Task Force ignores the history of antibiotics, of steroids, and other therapeutic categories, where competition has resulted in both quality improvement and price reduction. . . ."

On Patents

"At a time when it costs about ten times as much as a decade ago to develop a marketable new product . . . (should a company) be deprived of the incentives . . . prescribed for inventors and innovators generally . . .?"

On Physicians

"The Report is indefensibly pessimistic about the competence of practitioners of medicine . . . it notes that the doctor is faced with a great deal of advice, 'biased and unbiased' from commercial sources, and this is presumably true, but . . . a great deal of non-commercial advice, both biased and unbiased, also must be dealt with by the physician. . . ."

On an HEW "Medical Letter"

"What is needed is far from another publication by the government, but rather additional private mechanisms (or better organization of present ones) for the free communication of medical ideas."

On Foreign Operations

"The discussion of foreign prices . . . does not state that the vast majority of American prescription drug products sold abroad are manufactured abroad, where costs are generally cheaper. . . ."

Contrary to the Report's implications, "foreign nations generally impose fewer restrictions and less control on drug industries than in the United States. . . ."

On Drug Values

"A drug cost may go up but it may result in fewer visits to the physician, less hospitalization, or other increase in the efficiency of medical care that results in a net saving to the patient and/or the economy. . . ."

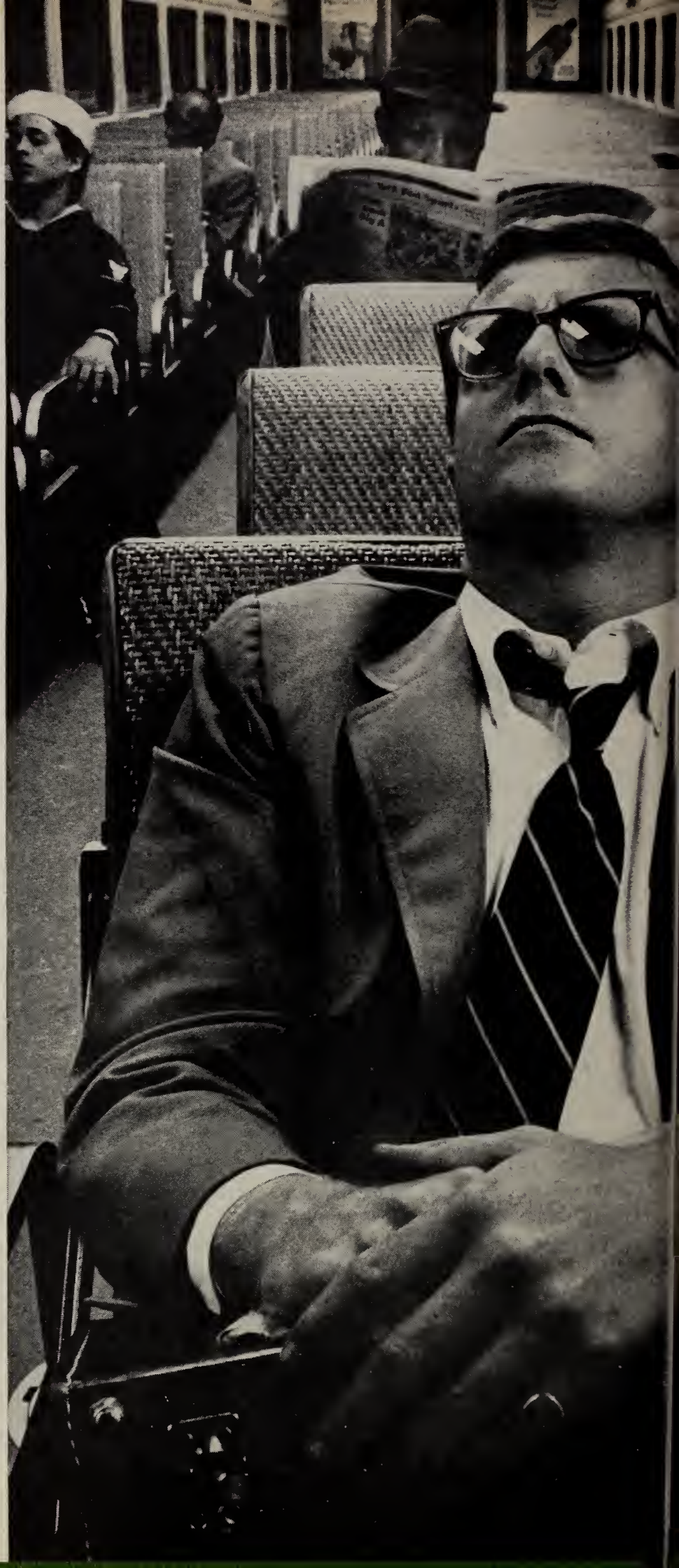
From *Journal Michigan State Medical Association,* December, 1968.

Symbols in a life of psychic tension

B.A.
cum laude

V.P.
at thirty-two

ECG
and complete examination normal (persistent palpitations)



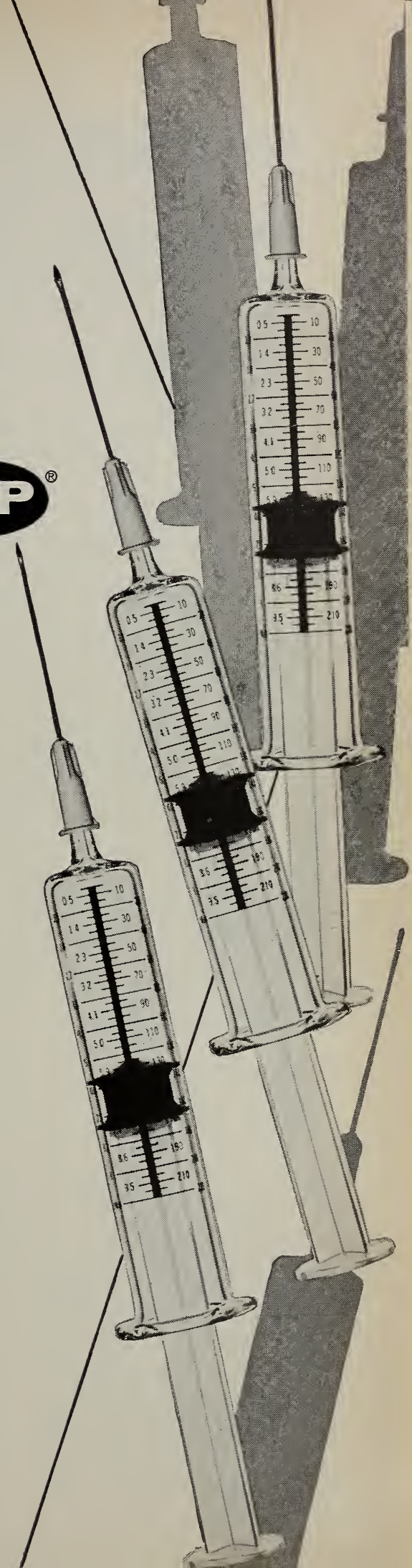
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Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville, Tennessee 37203.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

If reprints are desired, the requested number should be indicated in the letter accompanying the manuscript. The author will be billed by the publisher.

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VOLUME 62 APRIL, 1969 NO. 4

The most common cause of death from myocardial infarction is an arrhythmia. One of a number of drugs may control such disturbance. The author suggests the prophylactic use of a drug under certain circumstances to protect the patient during transplantation.

Cardiac Arrhythmia—Problems and Solutions: With Special Reference To Lidocaine*

WILLIAM EWERS, M.D., Nashville, Tenn.

Coronary heart disease is the largest single health problem of the Western World. It is also the largest single cause of death in the United States. With the advent of the Coronary Care Unit a long step was taken in the direction of decreasing mortality from this disease. Unfortunately, relatively little is being done to decrease the mortality of the 50% who die before getting into the Coronary Care Unit or after leaving the Coronary Care Unit.

By far the leading cause of death in this group is an arrhythmia. Advances in understanding the pathophysiology of cardiac arrhythmias and the increasing number of anti-arrhythmic drugs should lessen this mortality. The problem has become more complex, however, as to the choice of drug or whether electrical or other means of therapy are indicated. The problem is actually made more complex than it need be. For instance, a drug, lidocaine, most useful in controlling ventricular dysrhythmias, has nothing in its package insert that alludes to the cardiac use of this most effective antiarrhythmic. Lidocaine, better known as Xylocaine, has not received FDA approval for use intravenously in the control of dysrhythmias. Because of this the manufacturer cannot put into its package insert the rather vast amount of information available upon this drug demonstrating its superior effectiveness as an antiarrythmic agent. At a recent National Conference on Coronary Care Units sponsored by the American College of Cardiology, American Heart Association, and the Heart Disease Control Program of the Public Health Service, it was generally expressed that the individual physician can continue to use a drug such as lidocaine intravenously in heart disease when he considers there is an indication, and if he is able to demonstrate his understanding of its (the drug's) effects.[1] Hence the absence of a package insert with the available facts and information on lidocaine as an effective antiarrhythmic limits to some extent the average practicing physician's use of this potentially life saving drug.

Discussion concerning an indication for any drug, of course, begins with an assumption of an accurate diagnosis. Proper treatment of arrhythmias necessarily implies proper diagnosis. Inherent in proper diagnosis is the understanding of the basic pathophysiology of arrhythmias. Dysrhythmia results from alteration in the level of the threshold of maximal diastolic potential, from disturbances in cardiac automaticity, or changes in conductivity. An abnormal focus or ectopic focus develops when the sino-atrial node is depressed or when other conductive tissues depolarize more rapidly. When the ectopic or abnormal focus discharge rate is greater than the SA node and the discharge exceeds the threshold, the ectopic focus will be the dominant pacemaker. As long as this situation exists the arrhythmia tends to persist.

As a general rule, drug therapy should be withheld until the site of the ectopic focus is established. Since the same arrhythmia, as seen clinically, may have more than one

*Prepared upon request of the Middle Tennessee Heart Association.

cause, etiology must be considered in each situation. For instance, in ventricular tachycardia lidocaine may well be the treatment of choice. However, if ventricular tachycardia is due to digitalis toxicity, potassium chloride or diphenylhydantoin (Dilantin) are effective and might be indicated. It is obvious, of course, that discontinuing at least temporarily the offending cardiac glycoside is primary. Of additional interest, the independent studies of Katz and Zitnik[2] and Greenspan and associates,[3] demonstrated the ineffectiveness and potentially increased hazards of D. C. (direct current) shock treatment in digitalis-induced ventricular arrhythmias. The work of these separate investigators, both done on mongrel dogs, demonstrated lidocaine or a similar type of compound to be the treatment of choice in digitalis-induced ventricular arrhythmia. The effective use of lidocaine in digitalis toxicity has been well described by other investigators as well.[4] If ventricular tachycardia were due to excess of quinidine, respiratory acidosis, hypercalcemia, or hyperkalemia, or even reversible hypoxia, lidocaine or procainamid (Pronestyl) could be hazardous, as the underlying cause should be removed or corrected.

Basically the decision as to use of the proper drug in ventricular arrhythmias depends on the decision as to whether or not the ventricular arrhythmia results from the suppression of higher centers. That is, whether the abnormal rhythm mechanism is due to quinidine, hypoxia, or vagal action, or results from an alteration in ventricular conductive tissue such as from myocardial injury. In the latter, i.e., myocardial injury, that results most frequently from infarction, the ventricular arrhythmia which follows usually responds most gratifying to proper dosages of lidocaine.

If this drug is such an effective agent in the specific clinical conditions, then it is important to "understand the effects of lidocaine."

Lidocaine (Xylocaine-Astra; diethylamine -acetate 2, 6-Xylidine) has been used for many years as an effective local anesthetic. Relatively recently it has been demonstrated to be an effective antiarrhythmic. Lidocaine was first reported as being effective in the management of ventricular arrhythmias in 1950 by Southworth and associates[5] who reverted ventricular fibrillation which was precipitated by cardiac catheterization. Following this, numerous studies including one by Meneely and collaborators,[6] at Vanderbilt in 1952, showed the efficacy of lidocaine in the management of arrhythmias, particularly those of ventricular origin. The method of action of the antiarrhythmic effect of lidocaine is somewhat similar to that of procaine, procainamide, and quinidine. There are a number of aspects of lidocaine that make it chemically superior to these drugs. With lidocaine ventricular excitability is depressed, and with increasing doses conduction time is slowed and the refractory period is prolonged. With lidocaine the SA nodal pacemaker is unaffected. In therapeutic doses blood pressure is not significantly lowered and the cardiac contractivity is not diminished. Quinidine and procainamide may produce hypotensive reactions, especially after parenteral administration. Lidocaine (1 to 2 mg./kg. intravenously) has a similar mechanism of action but a shorter half life. The clinical effect of an intravenous dose has disappeared within twenty minutes and hypotension is uncommon.

The onset of action with lidocaine intravenously varies from 45 to 90 seconds and the duration of action is from 10 to 20 minutes. This is a remarkable advantage of the drug in contrast to the other drugs mentioned, i.e., procaine, procainamide, and quinidine (with a single oral dose of quinidine the half life is 6 hours). In large doses, lidocaine may produce some circulatory depression but this is not as significant as it is with comparable doses of procainamide. The dosage of lidocaine indicated for antiarrhythmic effect is between 0.5 and 2.0 mg per kg. For practical purposes 50 to 100 mg usually is given intravenously. This dose may be given as often as every 10 or 15 minutes without producing myocardial depression. In massive doses, that is in excess of 750 mg per hour, side effects may develop which include euphoria, muscular twitching, dysphagia, visual changes, and even seizures. The seizures that have been

reported have usually been controlled with moderate doses of barbiturates.

Lidocaine is oxidatively metabolized in the liver by an enzyme system localized in the liver microsomes. The presence of both oxygen and reduced TPN is necessary for the oxidation. Less than 10% is excreted unaltered by the kidney. This rapid clearing from the blood stream offers advantages for acute or "IV push" usages but leads to a slight problem for long-lasting effects. However, this brief action and rapid clearing lends itself to what is known as an "intravenous drip" method of delivering lidocaine. This method of administration is most effective in the control of rapidly recurrent arrhythmias and is currently used in many Coronary Care Units.

The present indications for the use of lidocaine in clinical cardiology can be seen by understanding its method of action and other aspects of its metabolism. It would appear that lidocaine would be of particular value in preventing, converting, or ameliorating mechanically induced arrhythmias such as seen during cardiac surgery. The use of lidocaine would be contraindicated in patients with the Stokes-Adams syndrome and with an AV dissociation associated with a slow nodal or idioventricular pacemaker. It appears obvious that current knowledge tends to indicate the use of lidocaine in the treatment of ventricular arrhythmias when intravenous administration or rapid action is indicated.

Cardiac arrhythmias remain a major cause of mortality. The majority of arrhythmias are atrial in origin and have relatively little serious consequence. However, many arrhythmias, largely those of ventricular origin, are potentially lethal. Mortality rates range from 70 to 90% in cases of cardiac arrest occurring outside the operating room. Immediate recognition of these dangerous arrhythmias is of absolute importance in patient survival. There is no doubt these arrhythmias may be identified and recorded electrocardiographically. However, many arrhythmias may be suspected by virtue of pre-existing conditions. That arrhythmias due to hypoxia usually follow a certain definite sequence has been demonstrated by Hitchcock and Keown.[7] The sequence suggested by their study was that hypoxia produces atrial bradycardia followed by nodal bradycardia, then ventricular bradycardia, and finally ventricular asystole. This is the sequence of events occurring in uncomplicated hypoxia of the relatively normal heart in a closed chest. However, hypoxia may produce a different course of events beginning with coupling and progressing to multiple premature ventricular contractions and ventricular tachycardia. Hypoxia plus stimulation or epinephrine very frequently leads to a series of events in which atrial rhythm progresses through multifocal premature ventricular contractions and then ventricular fibrillation. This is the practical clinical situation that may exist with an acute myocardial infarction with secondary injury and hypoxia and stimulation from pain and fear of death. It is in this situation that early preventative treatment may avoid acute ventricular fibrillation which may occur in the first few minutes after myocardial infarction. A preventative medication such as 50 mg of lidocaine I.V. administered routinely, even before clinical evidence or arrhythmia, might prevent this arrhythmia and "save" the patient.

The chemotherapy of arrhythmias and cardiac arrests is frequently confusing. A number of drugs other than lidocaine have been used effectively through the years in the treatment of arrhythmias. These deserve a brief review.

Quinidine is the universal cardiac depressant. Such depressant activity can suppress an undesirable focus of cardiac activity or "slow it down" so another more desirable focus can take over as the pacemaker. Failure with quinidine very frequently is due to small doses so chosen as to avoid toxicity. It is necessary to increase the quinidine dosage to a therapeutic level while monitoring with the EKG to avoid toxic effects. Two points are worthy of special emphasis. When quinidine is used in heart block, the stage is set for disaster, since suppression of an abnormal pacemaker may remove the ventricle's only stimulant and lead to cardiac standstill. The other point is that the prophylactic dose of quinidine is very close to the therapeutic dose. Every

one has noticed the tendency of cardiac arrhythmias to reappear after apparently successful use of quinidine. This most frequently is due to the fact that the underlying cause of the arrhythmia was not corrected, or the physician possibly operating under the fallacy that prophylaxis is easier than treatment dropped dosage either too fast or too much.

Potassium chloride has been used for over sixty years in the treatment of ventricular fibrillation. D'Halluin (quoted by Milstein[8] treated ventricular fibrillation by intravenous infusion of 5% potassium chloride solution as long ago as 1903. It is known that potassium possesses an antifibrillatory property and standstill can be produced with this drug. The use of electrical defibrillation is significantly superior to the use of potassium chloride in the treatment of ventricular fibrillation.

Calcium chloride is known to increase the contractile force of the heart with a minimal increase in irritability of the myocardium. Kay and Blalock[9] first recommended the use of calcium chloride for the treatment of cardiac standstill. It is available as a 10% solution and from 2 to 5 ml of this mixture injected intracardiac often has been successful particularly after defibrillation.

Procaine and *procainamide* have been known for thirty years to be effective in reversing ventricular fibrillation. Beck and Mautz,[10] in 1937, used procaine in reversing ventricular fibrillation.[19] Wiggers,[11] in 1940, recommended initially procainamide. One of the hazards in the use of these drugs is the appearance of asystole that may follow its use. The drugs remain effective in ventricular arrhythmias but are being replaced by the more practical lidocaine.

Atropine sulphate is a valuable agent for treatment of Stokes-Adams syncope, and in the treatment of excessive vagal stimulation from such things as cyclopropane, halothane, or reserpine. Occasionally in acute hypoxia bradycardia results and can be ameliorated with atropine sulphate. The usual dose of atropine for this is 0.4 to 0.6 mg intravenously.

In discussion of any chemotherapy of cardiac arrhythmias and of cardiac arrest a mention must be made of *sodium bicarbonate.* Acute and metabolic acidosis accompanies cardiac arrest and the subsequent acute hypoxia. The metabolic acidosis has an adverse effect on the efficacy of drugs and even adversely affects electrical defibrillation. Sodium bicarbonate remains the drug of choice in this condition. The routine injection of 44 mEq in 50 ml every five minutes during resuscitation is recommended.

The use of such drugs as *epinephrine* in cases of cardiac arrest is well established and leaves little to be said. However, it is to be recalled that adrenalin may increase myocardial irritability and that premature ventricular beats may occur following its use. As mentioned, this dangerous arrhythmia is more apt to occur in the presence of hypoxia and also with metabolic acidosis. *Isoproterenol* (Isuprel) has been shown to be as effective as epinephrine in cases of standstill but its use is still generally reserved for the treatment of standstill in Stokes-Adams attacks.

The beta adrenergic blocking action of *propanolol* is being used therapeutically in the management of some arrhythmias.[12] Propanolol reduces myocardial oxygen function by decreasing heart rate and diminishing myocardial contractivity. Propanolol exerts its antiarrhythmic action by both antiadrenergic blockade and quinidine-like action. Its applications include slowing of ventricular responses in rapid atrial fibrillation and flutter and control of digitalis induced ventricular premature contractions and ventricular tachycardia. It has been used effectively in reducing the frequency of paroxysmal atrial tachycardia and atrial fibrillation in Wolfe-Parkinson-White syndrome. It may be hazardous if used with partial atrioventricular block where complete dissociation may develop or in patients with bronchial asthma. In patients receiving insulin or hypoglycemic drugs orally propanolol may severely depress the blood glucose. Propanolol's use in arrhythmias at present requires exacting clinical circumstances.

No mention of *digitalis* has been made because of the great general knowledge regarding this drug. Digitalis, however,

causes efflux of potassium from the myocardium, and loss of myocardial potassium may contribute to the arrhythmia during digitalis toxicity. This arrhythmia, digitalis-induced ventricular tachycardia, has been mentioned previously. It is sufficient to say that digitalis has a firm place in the treatment of atrial dysrhythmias, an occasional use in other arrhythmias, and almost an absolute use in the treatment of congestive heart failure.

Other drugs used as part of the antiarrhythmic armamentarium includes *diphenylhydantoin* (Dilantin) which diminishes the myocardial content of sodium and acetylocholine, and decreases conduction velocity. It is used intravenously to treat arrhythmias but its intravenous use has an associated risk in that it has been known to produce high degrees of AV block, hypertension, or even unexplained sudden death.

Arrhythmias may be secondary to *electrolyte imbalance*. The recognition of an arrhythmia due to electrolyte disturbance is of absolute importance since treatment is directed at the underlying disorder and not at the specific arrhythmia. The same abnormal electrolyte set-up may induce a number of different arrhythmias which would not be treated by attacking the various arrhythmias, but by simply treating the underlying electrolyte disorder. *Hypokalemia* increases the membrane potential and excitability and rate of diastolic depolarization, causing an increased rate of discharge of automatic tissue. As a result, premature beats and superventricular nodal tachycardia may appear. Hyperkalemia decreases potential and excitability of resting membrane and the rate of diastolic depolarization. This may result in the depression of the SA node and prolongation of ventricular conduction. Ventricular tachycardia and cardiac arrest may follow. Obviously, to treat these arrhythmias the serum potassium concentration should be either elevated or lowered, whichever the need, to normal levels.

Hypercalcemia produces sinus bradycardia and premature ventricular beats, and may lead to atrial fibrillation and AV block. The pattern may resemble digitalis intoxication. With severe hypercalcemia cardiac arrest may be seen in systole. The effective treatment by hypercalcemia consists of large volumes of fluid and corticosteroids. Calcium kelating agents (edathamil, EDTA) may be nephrotoxic and hazardous. The use of infusions of buffered sodium-potassium acid phosphate or sodium sulphate may be useful. It is to be remembered that with hypercalcemia digitalis is to be used with great caution, since the existing hypercalcemia produces changes similar to the electrophysiologic changes of digitalis toxicity. Of incidental note is that *hypermagnesemia* may produce an increase in sensitivity of the carotid sinus and an increased incidence of AV blocking and nodal rhythm. The arrhythmia with hypermagnesemia may simulate that of hyperkalemia. Calcium may reverse the effects of hypermagnesemia and magnesium depletion is accompanied by loss of intracellular potassium. Electrolyte disorders frequently may occur with involvement of more than a single ion deficit or excess. In such cases the arrhythmia would be due to the complex electrolyte disarrangement but could simulate a single electrolyte abnormality. This necessitates, of course, constant alertness to the possibility of underlying multiple electrolytic abnormalities.

It is obvious from reviewing the various agents available for chemotherapy of cardiac arrhythmias and arrest, that the important thing in the use of any drug in the treatment of arrhythmia is to couple its use with a primary attempt at removing the underlying cause be it due to electrolyte change, hypoxia, or hypercarbia, etc. Proper treatment with the restoration of oxygen and carbon dioxide tension obviously are as important as the emergency use of the various drugs. If the arrhythmia is sudden and cardiac arrest has occurred, the swiftest way that the drug can reach the myocardium is naturally the best. Very frequently this is by intracardiac injection with immediate postinjection chest or cardiac compression. This postinjection compression will carry the drug from the ventricle into the coronary arteries with distribution to the myocardium. The use of lidocaine intravenously is obviously an important addition to the chemotherapeutic ar-

mamentarium of cardiac arrhythmias and arrest.

In a very practical sense one vital use of lidocaine may be considered. This is the "house call" use of lidocaine. It would seem quite logical to have lidocaine available in any situation in which a patient with acute coronary disease is being treated. Most frequently in the early treatment of an acute coronary, with its classical compressive substernal chest pain and its "shocky," alarmed patient, the relief of pain is primary. However, very frequently after pain has been relieved and the patient is on the way to the hospital he may experience sudden fatal ventricular arrhythmias. It would seem logical in such a situation, before the patient is transferred from the home to the hospital or even from the Emergency Room to the Coronary Care Unit, that an intravenous injection of 50 mg of lidocaine be given to ameliorate the potential danger from ventricular arrhythmias. There is no doubt that a number of patients seen at home and treated with analgesia and referred to the hospital never make it because of this ventricular dysrhythmia. The routine use of the proper doses of lidocaine intravenously prior to the time the patient can be monitored would seem perfectly justifiable and perfectly safe, and would probably decrease markedly the percentage of deaths prior to admission to the Coronary Care Unit. It also would seem very logical to have a standing order for the registered nurse to give lidocaine intravenously either by 50 mg "push" or drip during the period the patient is hospitalized. During the patient's time in the Coronary Care Unit this most frequently is covered by a standard order, but after leaving the Coronary Care Unit and while on the General Ward this may not be true. The length of time it takes to arrange a physician's order for the use of lidocaine intravenously is much too long for the safety of the patient. Since the IV use of 50 mg of lidocaine is fraught with little if any danger, the routine use of it in an early nonmonitored acute myocardial infarction would seem justifiable. In this way the 50% mortality before and after treatment in the Coronary Care Unit could be lessened.

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The author points up the responsibility of members of the medical profession in the prevention of blindness, meaning that only one with a medical education is capable of evaluating local or systemic disease.

Medicine And Blindness: Its Relationship To Optometry

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Introduction

Physicians in ophthalmology as well as all physicians should recognize the serious public health problem posed by current attempts to equate optometrists with eye physicians. It is imperative that physicians be well informed on this issue for the problem to be resolved to the public's good.

Medicine takes the position that optometrists should devote themselves to refraction and prescription of eye glasses for optical (not "visual") problems in otherwise normal eyes.[1] Medicine has emphasized that ocular diagnosis includes the professional act of the determination of the presence or the absence of disease, and that this requires full medical training.[2]

In many states optometrists have supported legislation to prevent all levels of public agencies from distinguishing between medical services and optometric services, except with respect to the use of surgery and drugs.[3] In some states, under optometric prodding, the legislatures have prohibited private insurance contracts (commercial and Blue Shield) from making the distinction between medical services and optometric services. These two areas of legislative action were made law in the State of Tennessee during the 1965 Legislature. In other states, repeated attempts have been made to obtain legislative authorization for the optometrists to use drugs, and even the authority to perform operations has been sought.

In a recent survey by The Gallup Organization, Inc., conducted as a public opinion survey for the Research to Prevent Blindness, Inc., some rather interesting results were obtained.[4] One finding was that the disease or affliction most feared by the American public is cancer, and blindness is the second most feared by 18% of those interviewed. Yet, very few people were found to be informed concerning diseases of the eye. Of those questioned, more than 80% could associate an optometrist as an "eye doctor," while only 46% associated an ophthalmologist as an "eye doctor".

In a talk before a Research to Prevent Blindness Science Writers Seminar, Dr. Stein[4] pointed out some significant facts. There are 1,000,000 functionally blind people in the United States, and another 30,000 go blind each year. Visual disorders constitute the Nation's leading cause of disability. Ninety million Americans have some kind of eye trouble, and in 3,500,000 the trouble is serious.

It would seem to be the responsibility of every physician to acquaint himself with the training, services, and duties of all the para and allied medical disciplines, and to be aware of their value as well as their limitations. Legislative efforts to extend the legitimate areas, such as clinical psychology, are often coupled with efforts at the same time to extend the illegitimate areas, such as chiropractory. The socioeconomic and political problems of one area of medicine affect all of medicine; if medicine is to survive in this state and this country as we know it, we must work together for the common good of all.

Historical

At the turn of the century, there were few areas of this country where physicians could obtain good postgraduate training in ophthalmology. It was equally difficult to distinguish the various levels of postgraduate training acquired by different practitioners who treated the eyes. Adequate

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surgical experience and a broad knowledge of optics were two weak areas in the training of ophthalmologists in this country. Out of this situation arose the first American Board in *any* specialty—the American Board for Ophthalmic Examinations (later changed to the American Board of Ophthalmology). The first examination by this Board (and therefore the first examination by any American Board in a medical Specialty) was offered here in Memphis, December 13 and 14, 1916, at Lindsley Hall. Dr. W. Likely Simpson was a candidate for this first Board (and passed the examination, we might add). During this time the refracting optician was filling a void by beginning to seek licensure in the various states of the Union, beginning first with Minnesota in 1901. *It was not, however, until the last quarter-century that the optometrist, as he is now called, began to exploit the idea that he too was an "eye doctor", and that he was qualified to recognize disease.* Since that time, efforts have been made consistently to extend the definition of optometry to include traditional areas of medicine.

Present Problems

Many optometrists still confuse the public further by the misuse of recognized treatment in a seemingly similar, but pseudoscientific, way. Examples of this are the use of colored lights for headaches, of Doman's "patterning" or "creep-walking" for retarded readers, and the Bates' method for treating myopia. Unfortunately their acts reflect upon medicine as a whole, since they try to assume the physician's role and, understandably, do not display in their acts the influence of tradition, custom, and history which motivates medicine to promote ethical, progressive conduct.

The practice of a physician to refer patients directly to the optometrist without first ruling out the existence of disease, or the referral of patients to the optometrist for other than strictly optometric care is not in the best interest of the patient. The practice is also common for the optometrist to "short-circuit" a referral to an ophthalmologist when medically indicated and to send the patient directly instead to another physician. This is not in the best interest of the patient and merely delays the ultimate care needed by the patient.

A past president of the Memphis and Shelby County Medical Society, Dr. Ralph Rychner, gave us the "no difference principle" which so clearly states the present problems in a "nutshell":[5] *"Anything less than a medical examination of the eyes may jeopardize, not only the patient's vision, but his general health, and even his life.* Although many agents may be administered by one without medical training, the proper use of agents, such as orthoptics, diathermy, contact lenses, thermal agents, radiant and sonic energy demand as much as does the use of drugs and surgery—a specific knowledge of their physiologic and pathologic effects. Anything less than a complete medical training does not qualify one to do more than to evaluate the refraction of the eye and adapt lenses for corrective therapy in cases when this can be done without drugs."

The 1955 resolution clearly re-emphasizes the position of the A. M. A.:[1] "Request that the various state medical and ophthalmological societies be vigorously supported by the A. M. A. in an unremitting opposition to further encroachment in the field of medicine by optometry or any other non-medical groups."

Again, in a *Final Report of the Committee to Study the Relationship of Medicine with Allied Health Professions and Services* given to the House of Delegates, American Medical Association, June 16, 1960, the following was stated:[6]

"Diagnosis, as much as medical therapy, requires medical training. Ocular diagnosis can only be made by the meticulous integration of the patient's history and the functional, optical, and physical findings, pharmacological responses, corneal tonometric readings, and laboratory findings, all interpreted in relation to the individual and his environment.

"The symptomatology of such diseases as brain tumor, multiple sclerosis, myasthenia gravis, and cerebrovascular disease at times has simulated single ocular dysfunctions. In such situations, opthoptic exercises have sometimes been instituted as therapy when patients have not had medical examination

and diagnosis. Not through human error, but lack of medical training on the part of the optometrist, imparied vision due to tumors of the eye and the brain, to retrobulbar neuritis, and to ocular injury have been mistaken for amblyopia."

Summary

Efforts of a paramedical group to encroach on the practice of medicine affect medicine as a whole and not just the individual members of the profession.

The prevention of blindness is a responsibility we all share, and being informed is one way we can discharge that responsibility.

Unity of purpose will give strength to medicine in coping with this and the many other problems facing medicine today.

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EMERGENCY TREATMENT OF ACUTE PULMONARY EDEMA. (From Clinical Cardiology by Philip Samet, M.D.)

Acute pulmonary edema is a common, dramatic and often catastrophic event in the life history of the cardiac patient. It is primarily an expression of disease of the left side of the heart and is therefore seen in patients with acute myocardial infarction, mitral valve disease especially mitral stenosis, aortic stenosis, aortic regurgitation, severe hypertension, and occasionally in individuals with rapid tachycardias or pulmonary embolism.

In the previously untreated patient the cornerstones of treatment of acute pulmonary edema are:

1) sedation, usually with morphine
2) improvement of myocardial function by digitalization
3) onset of rapid diuresis with the newer diuretic agents
4) decreasing venous return and right ventricular output
5) removal of precipitating and aggravating factors such as tachy-arrhythmias, paroxysmal hypertension, arterial hypoxemia, metabolic or respiratory acidosis, and increased work of breathing
6) proper positioning of the patient.

The above therapeutic measures are most often used concurrently rather than consecutively, especially if the pulmonary edema is severe. Formerly discussion often centered about the concept whether morphine or digitalis was the most important form of therapy in acute pulmonary edema. The development of the newer diuretic agents such as ethacrynic acid and furosemide has added another primary form of treatment for this condition. Generally, all three agents are administered early in the course of therapy for severe pulmonary edema, in addition to placing the patient in the upright position unless shock is present.

The development of rapidly acting diuretic agents-ethacrynic acid and furosemide has altered the therapy of acute pulmonary edema. The use of 1 to 2 ml. of a mercurial diuretic intravenously was formerly advocated, but since the onset of a diuresis was delayed for 4 to 6 hours, the issue was usually decided before an effective diuresis ensued. However, administration of either ethacrynic acid or furosemide results in much more rapid diuresis. Both agents when given intravenously produce the onset of diuresis within 15 to 20 minutes. A liter of urine will often be produced within 60-90 minutes. Theophylline derivatives such as aminophylline (0.24 to 0.48 gm in 20 ml of solution and given slowly intravenously) are beneficial when severe bronchospasm complicates the picture of pulmonary edema.

Phlebotomy is accomplished by removal of 500 ml of blood as rapidly as possible. Positive pressure breathing may also be employed to decrease venous return. Blood pressure must be watched carefully during positive pressure breathing to prevent serious hypotension. Correction of arterial hypoxemia is accomplished by inhalation of high oxygen mixtures and correction of the pulmonary edema. (*Abstracted for the Middle Tennessee Heart Association* by Crawford W. Adams, M.D., Nashville)

CASE REPORT

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North American Blastomycosis

Blastomycosis was first reported in 1894 by Gilcrest. The etiologic agent *Blastomyces dermatitides* was named in another report by Gilcrest and Stokes in 1898. Natural infections have occurred in the horse and dog. McDonough and associates,[1] in 1961, recovered the fungus in a single isolation from a study of 841 soil samples. This positive sample was obtained in an area where a dog had died of blastomycosis two years previously. In the human, the disease is generally thought to originate as a primary respiratory infection with secondary dissemination usually involving pulmonary, bone, and cutaneous structures.[2] The pulmonary disease produced is generally severe and progressive. Although infection by primary inoculation of the skin is considered very rare,[3] the patient described in this report gives evidence of such infection. Laboratory acquired infections have been reported rarely. Three cases have resulted from inoculation of fingers during autopsies. One recent report describes the first infection presumed to have been acquired in the laboratory from inhalation of the saprophytic form of the fungus.[4]

Case Report

A 45 year old diabetic white man, was first seen on Feb. 24, 1967 at Fort Sanders Presbyterian Hospital, where he had been hospitalized by his family physician.

His present illness began in December of 1966, when he injured his left knee on a sawhorse in the basement of his home. A small abrasion was noticed at that time. The lesion increased in size and began to drain purulent material. He was seen in his family physician's office, and incision and drainage was performed. Despite drainage and antibiotic therapy, the lesion persisted. Two weeks later an enlarged lymph node was found in the left popliteal area. This node subsequently became fluctuant and was also drained. Three or four days later, subcutaneous and skin lesions were noticed in two locations on the inframedial aspect of the left thigh.

On Jan. 1, 1967, an enlargement of the right hilum was apparent on chest x-ray. There was no history suggestive of disease of the central nervous system, eyes, ears, nose, or throat. Although he had had slight hypertension in the past, blood pressure readings had become normal following voluntary weight reduction. He had severe episodes of coughing in November of 1966, which he attributed to smoking. At that time he had noticed scant mucoid sputum production. He stopped smoking and the cough subsided prior to onset of the present illness. He gave no history of chest pain, shortness of breath, orthopnea, or cyanosis. He has occasionally noticed minimal wheezing with upper respiratory infections. In January of 1967 he had a negative PPD Intermediate skin test. He gave no complaints referrable to the genitourinary, musculoskeletal, or gastrointestinal systems. There was no history of drug allergies, asthma, or hay fever.

He had an appendectomy in 1936, Vincent's angina in 1944, and fracture of the left arm as a child. He had some gastrointestinal symptoms in 1954, which were characterized by his physician as a "nervous stomach." He has had no similar complaints since that time. He gives no history of pleurisy, pneumonia, or tuberculosis. A diagnosis of diabetes was established during his first hospitalization for the lesion on his leg. He has been treated for this with Orinase. He is a former cigarette smoker, having smoked approximately one pack of cigarettes per day for twenty years. He smokes a pipe at the present time and is an occasional drinker. He is an engineer with a plastics company and his work is mainly of office type. He has had no significant exposure to coal, rock dust, cotton, farming, animals, or birds. He does, however, occupy a house which is on an old farm site. His mother had diabetes. His mother and father both died of "heart attacks." There is no history of allergy, asthma, lung disease, or tuberculosis in the family.

Physical examination showed a well developed, well nourished, alert, cooperative, white man. Examination of the head showed no areas of tenderness. The pupils were equal and reacted to light and accommodation normally. Funduscopic examination showed no abnormality. No mucous membrane lesions were seen. The neck was supple and no nodes were palpable. Examination of the chest showed normal AP diameter and chest wall, equal excursions, and normal percussion note. The heart was not enlarged. There was a normal sinus rhythm and no murmurs were audible. No abdominal masses, tenderness, or enlarged organs were noted. There was no clubbing or edema and pulses were normal. No bone or joint deformity was seen. Neurologic examination showed symmetrical deep tendon reflexes. Sensory examination was normal. There was no muscle weakness or atrophy. There was an ulceration seen approximately 2 cm. in diameter on the medial aspect of the left knee. A small amount of sanguinopurulent exudate was present. A smaller lesion was noticed anterior to the first measuring about 1 cm. from which there was no drainage.

Laboratory studies were as follows: PCV. 44%, Hgb 14 Gm., WBC count 9,200 with 79% neutrophils, 15% lymphocytes, and 6% monocytes. Urinalysis showed a specific gravity of 1.024. The urine sugar and albumin were negative; urinary sediment was unremarkable. The blood sugar was 86 mg., BUN 12.5 mg., and cholesterol 242 mg. per 100 ml. Sodium was 139, potassium 4.3, chlorides 99.4 and CO_2 content 26.2 mEq/L. The routine culture of drainage from the leg lesions showed no growth. Blastomycin and PPD #2 skin tests were both negative. A throat culture grew normal flora. Repeated BUN and potassium determinations between Feb. 26 and Mar. 16 ranged as follows: BUN 21 to 26.5 mg. per 100 ml. and potassium 3.9 to 4.7 mEq/L. WBC count on Mar. 16, was 9,300 with a differential of 67% neutrophils, 26% lymphocytes, 5% monocytes, and 2 eosinophils; the sedimentation rate was 21. Complement fixation test for blastomycosis was positive 1:8 on Feb. 27. Ventilatory function study showed the corrected total vital capacity to be 4620 cc with a predicted vital capacity of 4070 cc. Forced expiratory volumes (timed) were as follows: FEV_1 3220 cc or 70% of TVC, FEV_2 3800 cc or 82% of TVC, FEV_3 4050 cc or 88 of TVC. Maximal voluntary ventilation was 137 liters per minute with a predicted MVV of 121 liters/minute.

Chest film showed a mass in the right hilum extending into the right upper lobe somewhat diminished from what it was on the initial film. Laminagrams suggested that the mass was nodal in origin. A repeat chest film done on Mar. 13 showed diminution in the hilar adenopathy. Sputum cytology showed no evidence of malignancy. A biopsy on Feb. 21, of the original skin lesion showed histologic changes of cutaneous blastomycosis.

Discussion

Blastomycosis is caused by *Blastomyces dermatitidis,* a dimorphic fungus occurring as a budding cell in mammalian infection but as a white dry mold in culture at room temperature.[2] The disease is probably more frequent than is generally appreciated. Furcolow[5] found 183 cases from the State of Kentucky and 104 cases from Tennessee. He suggested that disease was endemic throughout most of the state and thought many cases were unrecognized.

The pathogenesis is not definitely known, but it is not thought to be transmitted from human to human. Most students of this disease have believed it is contracted by inhalation of the organisms from some source in nature. This idea is supported by the fact that pulmonary lesions are present in approximately 95% of the reported cases.[2] Against this hypothesis, however, is the fact that isolation from soil, wood, and other substances is most difficult. In addition, the yeast forms are lysed in naturally occurring soil. (They can be grown in sterile soil.)

Organisms have been isolated from soil samples in Lexington, Kentucky and Atlanta, Georgia.[6] In one case, a female laboratory assistant probably acquired blastomycoses while handling cultures of the mycelial form.[4] This raises the question as to whether cutaneous blastomycosis might result from inoculation of the saprophytic form of the fungus into the skin.

The disease generally occurs in males, with the highest incidence being in the Mississippi valley area. There are generally three recognized clinical types. The *first* of these is the pulmonary form, which may at first appear as a mild respiratory infection with dry cough, pleuritic pain, and hoarseness. Later there is suppuration, hemoptysis, fever, and other generalized symptoms. A mild self-limited form similar to primary tuberculosis is not recognized in this disease.[2] The *second* form is systemic with involvement of skin, subcutaneous tissues, lungs, bones, kidneys, prostate, bladder, epididymis, meninges, and brain. The gastrointestinal tract is rarely involved. Granulomas may be found in the liver and spleen in approximately 40% of cases. Hilar adenopathy is common but cavitation is unusual.[3] In approximately 5% of pulmonary cases tuberculosis has also been found. Dissemination occurs in approximately one-half of pulmonary patients. X-ray changes are not characteristic and calcified nodules are not a feature of this disease in contrast to histoplasmosis.

The cutaneous form is the one most frequently found as a presenting complaint. This may be because the other forms are less obvious to the patient. The primary cutaneous form is suggested by regional lymph node involvement. The cutaneous form is felt to usually be due to hemotologic spread. Lesions tend to be multiple and are found generally on exposed portions of the body. Skin involvement is generally of a chronic nature.

Diagnosis is established by culturing the

etiologic *B. dermatitidis*. In some cases it is established by finding characteristic budding yeast in the sputum, skin, gastric contents, blood, urine, prostatic secretion, or wound drainage. Skin tests and serologic tests are not usually helpful in diagnosis. The organisms can also be identified in histologic section as was done in this patient. In a small number of cases blastomycosis can present as arthritis. The budding yeast may be found in the joint fluid.[7] In a recent series of 198 cases of proven blastomycosis, involvement of the central nervous system occurred in 9 patients.[8] Cerebral meningeal blastomycosis in this series was almost invariably associated with widespread disease of the skin, lungs, and other tissues.

The problem with treatment of blastomycosis in the past has been a rather marked tendency to relapse as long as two to three years after apparent cure.[3] Three drugs have remarkable chemotherapeutic activity against this organism—amphoteracin-B, 2-hydroxystilbamidine, and X-5079C. X-5079C compound causes an almost selective rise in BSP retention. It has limited use because of shortness of supply. Amphoteracin-B is a polyene antifungal agent developed in 1959. It is given intravenously as a complex of amphoteracin-B and desoxycholate. The usual maximum dose is 1.5 mg per kilogram every other day, or 1 mg. per kilogram daily. The initial dose of amphoteracin-B should be 0.25 mg. per kilogram increased by 5 to 10 mg daily until the maximum dose is reached. It should be given over a period of approximately 6 hours.[9] It can be given intrathecally in meningitis. Suggested total dose for blastomycosis infection is between 1 and 2 grams. About 75% of treatments are accompanied by side effects.[10] Side effects from amphoteracin-B include nausea, anorexia, vomiting, chills, fever, headache, anemia, hypokalemia, azotemia, hematuria, and albuminuria.[11,12] Renal toxicity from amphoteracin-B is dose related. By regulating blood levels carefully, smaller doses of amphoteracin-B can be given with less toxicity. In one series, 14 of 17 patients given less than 4000 mg of amphoteracin-B had elevated serum creatinine values, and 28 of 38 had increased BUN levels significantly greater than pretreatment levels. Pathologic changes in the kidneys following amphoteracin-B have included thickening of capillary loops, islands of tubular atrophy, and occasionally intertubular calcifications. Seabury treated 15 patients with blastomycosis with amphoteracin-B. Ten of these were cured by initial treatment. One relapsed with successful retreatment and one treatment was stopped because of renal toxicity. There were no treatment failures, although 3 deaths did occur, one from adrenal failure and 2 unrelated to mycosis or its treatment.[9] Indications for operative intervention in the treatment of blastomycosis are outlined by Larsen *et al.*[13] They suggest that surgical treatment may be indicated when there is a "grossly contaminated" operative field, or when residual disease is left because of "limited pulmonary reserve." He did not recommend postoperative therapy for a completely excised localized disease. Complete excision was apparently successful in 6 out of 12 patients treated without drugs in his series.[13]

Summary

A patient with blastomycosis involving skin, regional, and hilar lymph nodes is described. The possibility of primary cutaneous inoculation from a saprophytic form of fungus is discussed. At the time of reporting the patient was well and the disease had apparently been arrested.

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STAFF CONFERENCE

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Marginal Ulcer

DR. H. WILLIAM SCOTT, JR.: Gentlemen: It is a great pleasure to welcome the members of the Tennessee Chapter of the American College of Surgeons to Nashville and to Vanderbilt. We want to keep this session very informal and hope that you will feel free to interrupt the proceedings and ask questions and for explanations as you will. I hope, too, to call on many of you for comments and discussion. This first patient whom we will present is a man who came in with the problem of recurrent or marginal ulcer. Dr. Richard Tapper will present a summary of the case findings.

DR. RICHARD TAPPER: This 63 year old white man, was referred to the Surgical Service of Vanderbilt University Hospital in November, 1968 with the chief complaint of recurrent "ulcer".

The patient dates the onset of the present illness to 1927 when he had an episode of nausea, vomiting and epigastric pain. At that time he was found to have a duodenal ulcer with pyloric obstruction and a gastrojejunostomy was done. Since the operation the patient has been essentially asymptomatic and has enjoyed excellent health until approximately 5 years before this admission when he had a recurrence of persistent epigastric pain coupled with nausea and vomiting. For several months he was treated by his family physician with antacids and bland diet. Gradually symptoms subsided and in 1965 and 1966 he had very little trouble. However, in December, 1966 he had several black, tarry stools associated with epigastric pain, weakness and fatigue. He consulted his physician who again made a diagnosis of recurrent ulcer and reinstituted the bland diet. However, symptoms of ulcer disease persisted and in June, 1967, the patient had a truncal vagotomy and partial gastrectomy with a Billroth II anastomosis in his local hospital. He then did well for one year. In August, 1968, however, he again developed nausea, vomiting and epigastric pain which were relieved by milk and antacids. The nausea, vomiting and epigastric pain increased and he began to have bouts of melena. From August, 1968 until the present admission he has had a 20 pound weight loss which he attributed to the bouts of nausea and vomiting. He has never had hematemesis or diarrhea. Because of the recurrence of ulcer symptoms the patient was referred to this hospital for further evaluation and definitive therapy.

Family history is significant in that his mother had a history of peptic ulcer disease as did one brother.

Physical examination: The BP was 128/70, P.88, T.98.6. The patient was a well developed, well nourished white man in no acute distress who appeared somewhat pale. Head, eyes, nose and throat showed no gross abnormalities. Heart and lungs showed findings within the limits of normal. Positive findings were related to the abdomen which showed a well healed midline surgical scar. There were no areas of abdominal tenderness and no masses. There was no organomegaly. Bowel sounds were active and normal. Rectal examinatin showed the prostate to be 2+ enlarged but without nodules. Extremities showed no abnormalities. Pulses in legs and feet were equal and symmetrical. Reflexes were physiologic.

Laboratory data at the time of admission showed urinalysis to be within normal limits. Hgb. was 11 gms.% with a pcv. of 35.5%. Leukocyte count was 7,400. Blood smear showed no abnormalities. SMA 12 and serum electrolytes were in the normal range. Stool was guaiac negative. An EKG showed sinus rhythm with occasional premature atrial contractions and was otherwise normal.

A twelve hour collection of gastric juice showed a volume of 1,630 ml with 34 units free acid (54 mEq per 12 hours), 102 units total acid (163 mEq per 12 hours). The Hollander insulin test was positive. Histalog (100 mg.) elicited a doubling of basal volume of gastric juice and acidity.

An upper GI series was done on Nov. 23 and a barium enema on the following day. Dr. Klatte will present these findings.

DR EUGENE KLATTE: First of all this man had a roentgenogram of his chest which showed no significant abnormalities. The upper GI series (Fig. 1) showed no abnormalities of the esophagus. There was a small hiatal hernia. The upper GI series on November 23 showed that there had been an approximately 50% resection of the distal stomach and a gastrojejunostomy. There was a 2 cm ulcer with its base surrounded by an edematous collar present on the jejunal side of Billroth II anastomosis. There was also some dilatation of the afferent jejunal loop which could be due to constriction of the jejunum at the ulcer site. A barium enema on November 24 was within normal limits.

DR. TAPPER: On Nov. 26 gastroscopy by Dr. Harrison Shull revealed no tumors, polyps or ev-

*From the Department of Surgery, Vanderbilt University Medical Center, Nashville, Tennessee.

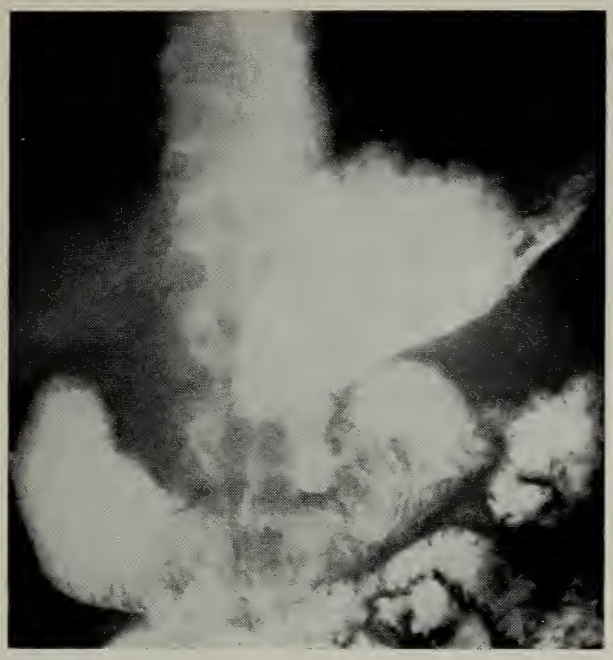


FIG. 1

idence of mucosal abnormality. The jejunal ulcer could not be visualized.

During this work-up, despite bland diet and antacids, the patient continued to complain bitterly of epigastric pain. Accordingly, on Nov. 26 an exploratory laparotomy was done, and the presence of a marginal ulcer with a surrounding inflammatory mass was confirmed. The duodenal stump was examined for retained antrum and none was found. The pancreas showed no evident tumors, nodules or other abnormalities. Two large vagus nerve trunks were identified in the peri-esophageal area. These were resected. A small esophageal hiatal hernia was repaired by suturing the crura snugly posterior to the esophagus with heavy silk sutures, and by suturing the cardia to the median arcuate ligament of the aortic hiatus by Hill's method. A small resection of the distal stomach which included the marginal ulcer and the adjacent gastrojejunostomy was then carried out, with end-to-end anastomosis of the jejunum and a Billroth I anastomosis of the gastric stump to the end of the duodenum.

In the postoperative period this patient has done extremely well. He has remained afebrile and has had a very benign postoperative course. His wound has healed per primum. He is now taking a soft postgastrectomy diet without difficulty and is ready for discharge from the hospital.

DR. SCOTT: Thank you, Dr. Tapper. We are certainly pleased with this good recovery. Dr. McSwain, would you show us the pathologic findings?

DR. BARTON McSWAIN: The final diagnosis was ulceration of junum and normal nerve. The microscopic examination of jejunum showed an ulcer with hemorrhage and inflammation extending into the muscle.

DR. SCOTT: A discussion of this patient's problem will be opened by Dr. John L. Sawyers.

DR. JOHN L. SAWYERS: Recurrent ulcer after operative treatment for duodenal ulcer results from inadequate surgical correction of the ulcer diathesis. In the patient just presented, Dr. Scott demonstrated that the cause for recurrent ulcer was an incomplete operative procedure for duodenal ulcer due to failure of the original surgeon to perform complete vagotomy. The ulcer did recur because of failure of the plan of operation. An overlooked vagal trunk is the most common cause of failure of the operative procedures for duodenal ulcer which are based on elimination of the cephalic phase of gastric acid secretion by vagotomy.

Some of the older operative procedures for duodenal ulcer, which are now recognized as physiologically ill-conceived, were accompanied by a high incidence of recurrent ulceration (Table 1). Simple gastroenterostomy resulted in a 30 to 50% recurrence rate of stomal ulcer because the procedure failed to eliminate excessive vagal stimulation of the intact parietal cell mass and the intact antrum. Additionally this procedure caused excessive release of gastrin by regurgitation of bile into the stomach.

Table 1

ULCER RECURRENCE RATE

Gastroenterostomy	30-50%
Antral exclusion	80%
Low distal gastrectomy (40-60%)	10-20%
High subtotal gastrectomy (75-80%)	2.5-8%

The antral exclusion operations of Finsterer and Bancroft and associates which were frequently used in the 1920's, proved to be very ulcerogenic with recurrent rates as high as 80%. The excluded antrum in the Finister or Bancroft operation was in contact with alkaline duodenal contents and was stimulated to a continuous secretion of gastrin without the possibility of the inhibitory influence of the acid pH of gastric contents.

The adverse effects of leaving a remnant of antral tissue on the duodenal stump when a surgeon does a partial gastric resection with a Billroth II type of reconstruction has been graphically described previously in a publication by Scott, Herrington, Edwards and Shull.[1] In the patient presented this morning, the duodenal stump was amputated to rule out the possibility of residual retained antrum. The pathologist found no residual antral tissue on his examination.

Low distal gastrectomy, 40 to 60%, without vagotomy was used extensively in this country in treating duodenal ulcer from 1930 to 1950. The gastrin secreting antrum was removed but not the important vagal source of stimulation of the parietal cell mass in the body and fundus. Recurrent ulcer developed in 10 to 20% of these cases.

Stomal ulcers occurred less often after the high subtotal gastric resections of 75 to 80% which became popular in the late 40's and 50's. Since a significant amount of parietal cell mass was removed with the antrum, the recurrence rate of ulcer was decreased to the range of 2.5 to 8%. However, the small residual gastric pouch which was the result of these extensive ablative procedures caused nutritional problems of considerable severity.

Current operative procedures for duodenal ulcer are based on vagotomy. The ulcer recurrence rate remains high with vagotomy and gastrojejunostomy—13.3% in the cases reviewed at the Vanderbilt Medical Center.[2] This reflects not only incomplete vagotomy, but enhancement of release of antral gastrin by antral stasis with regurgitation of alkaline jejunal contents into the stomach.

Recurrence after vagotomy and pyloroplasty has ranged from 4.5 to 16%. Our results in 285 patients undergoing vagotomy and pyloroplasty show a proven ulcer recurrence rate of 11% with an additional 7% of the patients suspected of having a recurrent ulcer by clinical or x-ray examination. Incomplete vagotomy accounted for most of these recurrences, but some patients with negative Hollander tests and no evidence of antral stasis on GI series also developed recurrent ulcers.

Vagotomy and antrectomy has the lowest recurrence rate of any operative procedure used for the surgical treatment of duodenal ulcer disease. Since Dr. L. W. Edwards introduced this operation in Nashville in 1947, it has been our operation of choice for the good-risk patient with duodenal ulcer. The ulcer recurrence rate remains low after long term follow-up of the patients. In 1,750 patients having had vagotomy and antrectomy, the recurrence rate is 0.7.[3] Only 13 patients have developed a recurrent ulcer and 4 of these had a Zollinger-Ellison tumor and one an adrenal tumor. Eight of the patients were thought to have had an incomplete vagotomy as the cause of their recurrence. It seems evident that antrectomy provides excellent gastric drainage and considerable protection against recurrent ulcer even when vagotomy is incomplete. (Table 2.)

Table 2

Ulcer Recurrence Rates After Operations Based on Vagotomy

Vagotomy-gastrojejunostomy	13%
Vagotomy-pyloroplasty	4.5-16%
Vagotomy-antrectomy	< 1%

Patients with recurrent ulcer should have measurements of their rate of gastric secretion, gastric acid output in 12 hour nocturnal collections and Hollander insulin tests for incomplete vagotomy, as well as repeated upper gastrointestinal fluoroscopic examinations prior to consideration of any corrective procedure. Definitive surgical correction of the ulcer diathesis in patients with recurrent ulcer is based on insuring completeness of vagotomy and completeness of antral resection, except for patients with the Zollinger-Ellison syndrome who have a uniquely different problem. Greatly elevated basal secretion of gastric acid and failure to increase acid secretion after Histalog stimulation are strongly indicative of the presence of a Zollinger-Ellison non-Beta cell pancreatic islet tumor as a cause of recurrent ulcer. A positive insulin (Hollander) test as was found in the patient under discussion indicates an incomplete vagotomy and was the clue to the cause of this patient's recurrent ulcer.

In a patient such as the one seen this morning, excision of the gastroenterostomy is advisable in addition to completion of the vagotomy. We prefer the Billroth I gastroduodenostomy reconstruction because it is more physiologic. Nutritional studies have indicated diminished loss of fecal fat and nitrogen and better iron absorption, when the duodenum is maintained in alimentary continuity.

The technique of selective gastric vagotomy has proven beneficial in insuring completeness of vagal denervation of the stomach as compared to the technique of truncal vagotomy. One of the reasons for overlooked vagal trunks in performing the conventional truncal vagotomy is missing a vagal branch that arises in the mediastinum. Careful digital palpation of the vagal trunks into the mediastinum, and searching for vagal branches that continue onto the fundus of the stomach can help eliminate this error. This technique of suprahiatal vagal dissection should become a routine procedure in performing truncal vagotomy just as it has become an important step in insuring the completeness of selective gastric vagotomy. It has been shown that an overlooked vagal branch innervating a small area of parietal cells in the fundus of the stomach can, over a period of months, sprout to innervate a larger area of parietal cells. What may be an initially adequate vagotomy may prove to be inadequate for protection against recurrent ulcer over a period of time as the area of vagally innervated parietal cells increases in size.

I would like to compliment Dr. Scott and the house staff on the excellent management of this patient and thank him for the privilege of discussing this interesting patient.

DR. SCOTT: Thank you, Dr. Sawyers, for an excellent discussion. Are there questions or comments from the audience concerning this patient and this problem?

DR. WILLIAM PRIDGEN (Memphis): Another cause of severe ulcer diathesis which has not been discussed this morning is hyperparathyroidism. We have recently seen a patient with an active duodenal ulcer who also was proved to have evidence of hyperparathyroidism. After removal of a parathyroid adenoma all symptoms and evidence of ulcer have disappeared in a very impressive way.

DR. SCOTT: Dr. Pridgen, thank you for bringing out this most interesting point. Dr. Oliver Cope in Boston and others have long emphasized the existence of an increased incidence of peptic ulcer in patients with hyperparathyroidism. As you know we have measured calcium and phosphorus levels in the sera of all patients with peptic ulcer in this hospital and medical center for many years as a result of Dr. Cope's enthusiastic emphasis on this relationship. We have also done upper GI series compulsively in all patients with hyperparathyroidism looking for peptic ulcer. In this hospital we have observed very few instances of this hyperparathyroid—peptic ulcer relationship and I know of only one patient here who has had the same impressive therapeutic result which you observed in your patient.

How hyperparathyroidism is related to peptic ulcer is still obscure. Parathormone given intravenously experimentally does not increase the rate of gastric acid secretion. The hormone is said to make connective tissues proteins more soluble by depolymerization; possibly it has by this means an effect in reducing gastric and duodenal mucosal resistance to normal acid peptic activity. Actually, there is room for doubt as to the validity of the concept that there is an increased incidence of peptic ulcer disease in patients with primary hyperparathyroidism. Since the incidence of peptic ulcer disease in the general population is in the range of 10 to 12% there would have to be an incidence of peptic ulcer disease in patients with hyperparathyroidism in excess of this baseline to permit the conclusion that hyperparathyroidism per se promotes an ulcer diathesis.

On the other hand in the syndrome of multiple endocrine adenomatosis the importance of which has been greatly emphasized in the last several years, parathyroid adenomas occur with a frequency equalled only by pancreatic islet tumors of all types. The overall incidence of peptic ulcer in these patients is in the range of 50% or more. Clearly in some of these patients the peptic

ulcer results from the gastrin output of the non-Beta cell islet tumor of the pancreas. In other instances of this syndrome it appears that hyperparathyroidism is indeed responsible for the ulcer diathesis.

At the present it seems important to emphasize that the patient with duodenal ulcer disease who develops the complications of massive bleeding, perforation, obstruction and/or failure to respond to a good medical regimen usually proves to have a simple hypersecretory duodenal ulcer diathesis which can readily be corrected by complete vagotomy and antral resection with a good prospect for an excellent long range result. However, careful endocrine evaluation is now needed in every such patient for the identification of those few individuals who have multiple endocrine adenomas and who require exhaustive genetic, metabolic and endocrine evaluation for an appropriate concept of their special needs in treatment.

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MID-SOUTH MEDICAL ASSOCIATION

MAY 21, 22, 23, 1969

MEMPHIS TENNESSEE

From the Executive Director
E. Ballentine

MEDICAL DIGEST

News of Interest to Doctors in Tennessee

STATE MAKES DECISION ON MEDICAID ADMINISTRATION . . . State of Tennessee officials have reached an administrative decision as to how the Medicaid program will be administered when it becomes effective on July 1 . . . The present intermediary for Medicare (Equitable Life Assurance Society of the U.S.) has been chosen by the state to administer payments to physicians under the proposed Medicaid program . . . And the Blue Cross-Blue Shield of Tennessee, the present intermediary for Medicare Part A, will serve as the intermediary for Part A hospital payments under the Medicaid program . . . This should make for an orderly administrative procedure that will function on the same principle and in the same manner as the present Medicare program . . . Of particular interest to physicians is the fact that the present intermediary for Medicare will be the same agency making determinations of payments to physicians under the forthcoming Medicaid program. This should make for considerably less confusion and delays. The TMA Board, officers, staff and the Governmental Medical Services Committee worked closely on this matter for the past two years.

* * * * *

WHAT'S USUAL AND CUSTOMARY FOR MEDICAL ASSOCIATION DUES? . . . Recent surveys reveal that the average physician pays $220 a year in professional membership dues if he belongs to his county, state and national medical associations . . . This appears to be close to the national average, according to a recent survey. AMA dues are the same everywhere—$70 a year . . . Sixty-five dollars seems to be average and compares with those other county societies that range from a low of $35 in Chicago to a high of $137 in Kansas City . . . State medical association dues of $85 are in the average range of state dues, which vary from $50 in Connecticut to $125 in Iowa . . . Professional affiliations appear to be more expensive in Des Moines, Iowa than anywhere else in the country—with its total tab there amounting to $320 for county, state and national medical association dues.

* * * * *

EMERGENCY SERVICES FOR SOLDIERS PAID THROUGH THIRD ARMY . . . There seems to be considerable confusion among the medical profession as to where and how to bill the Army for services rendered to military personnel . . . The notice in this issue of the Journal under "Announcements" will be of help to you as it is a definite guideline for collection of your fees . . . For complete details, please turn to the "Announcements" column in this issue of the Journal for details for the proper military headquarters.

* * * * *

A NEW SERVICE . . . The Audio News Journal, a new service provided by the American Medical Association to subscribing physicians to help them keep abreast of the "information explosion," is available . . . Subscribers to Audio News Journal will receive a 65-minute tape recording each month, which will include news from the political, social, and economic areas of medicine, as well as new developments in other areas of

medicine . . . Correspondents will cover major medical meetings and conduct interviews across the nation with medical leaders andothers whose actions affect medical practice. Each tape will contain short commercial messages.

* * * * *

ADMISSIONS UP FOR OVER 65 PATIENTS . . . Admission of over 65 patients to American hospitals is up more than 10% over last year, as Medicare gains impetus . . . Health Insurance Institute reports that one of five inpatients is over 65 and that studies made in July show a mean cost of $67 per patient day.

* * * * *

MEDICARE AMENDMENTS INTRODUCED . . . Senator Aiken (R) Vermont, has introduced S. 110 which would amend Medicare to: Remove the deductables in co-insurance features in Title XVIII; permit women to qualify for benefits at age 62; redefine hospital services on Part A to include payment for the professional services of radiologists, pathologists, anesthesiologists, and physiatrists; permit referral of patients for care in Extended Care Facilities from a hospital out-patient clinic instead of the present provision which requires three days of prior hospitalization; authorize payment for one routine physical each year; provide compensation for prescribed drugs (on a generic basis) under Part B; and provide eye and dental care under Part B . . . The Surgeon General would be authorized to establish a schedule of fees for physician services based upon the community "prevailing fees" . . . Also S. 111 would amend Medicare, to provide that the program would not pay more for a medical procedure than the average payment for that same service by the local Blue Shield Plan during the previous year. All patients would be reimbursed directly by the carrier with no billing done to the carrier or the patient by the physician . . . If this provision became law, physicians would be required to take all their Medicare patients on these terms and that they would be compensated for them on a "reasonable allowance" basis with no co-insurance or deductables . . . Both bills were referred to the Senate Finance Committee . . . The HEW Secretary would divide the country into geographic areas to reflect geographic differences in prevailing charges for services and establish for each area a fee schedule used by the medical prepayment organization in the area having the approval of "the largest organization of physicians in the area as of January 1, 1969" . . . This provision is interpreted to mean the health insurance plan most accepted by the state medical association.

* * * * *

A NEW TREND? . . . Harvard Medical School has announced plans to establish a prepaid health insurance program that will pay all of a patient's medical and hospital expenses . . . The prepaid group practice operation will be under a separate corporation, the Harvard Community Health Plan, which is being established by the medical school to administer the program . . . The Harvard group expects the plan to be in operation by next fall and hopes to enlist 30,000 persons within a ten mile radius of the medical school to participate . . . The cost is projected at about $50 per month per family.

* * * * *

SOCIAL SECURITY TAX INCREASES SCHEDULED FOR 18 YEARS . . . Tax hikes, for both employees and employers, are already projected for the next 18 years to pay for past revisions in the Social Security program . . . Any further benefit increases which Congress might legislate would require still more tax money.

Public Service

Communications Legislation

Hadley Williams, Public Service Director

CORPORATE PRACTICE, PROFESSIONAL CORPORATIONS AND THE LAW OF TENNESSEE . . . There is currently much discussion of corporate practice and professional corporations. TMA's legal counsel, Mr. Charles Cornelius, Jr., has provided the following summary which should be helpful to TMA members: The words "corporate practice" as they are generally used, refer to the unlicensed practice of medicine. Such corporate practice universally has been held to be illegal. The term "professional corporation" refers to an organization of licensed professional persons who are issued a corporate charter under a state statute. Such corporations are of relatively recent origin. As Edwin J. Holman of the American Medical Association Law Department has suggested (at an American Medical Association Legal Conference in April, 1964), perhaps we should stop using the words "corporate practice" and ". . . emphasize and explain that the lay controlled practice of medicine is intolerable and unacceptable in the public interest."

The courts of Tennessee and other jurisdictions in this country long have ruled that corporations organized under the general corporation laws of a state cannot practice medicine or any of the other "learned" professions. As stated by Judge Gailor in State ex rel Loser, Attorney General vs. National Optical Stores Company, 189 Tenn., 433 (1949):

> "The rule is uniform that a corporation cannot practice one of the learned professions . . ., and obviously, this implies that the corporation cannot employ a licensed practitioner, since a corporation acts only through agents. . . . ."

While the rule thus has been firmly established in American jurisprudence that a corporation cannot practice medicine, about fifteen years ago a move was commenced toward the enactment of legislation which would put professional people on the same basis tax-wise as corporations. The first legislation provided for the formation of professional associations by licensed professional personnel.

The first case to arise involving a professional association was U.S. v. Kintner, which was tried in the Federal District Court in Montana. A physician named Kintner had organized his medical group into a "professional association" and claimed that the association was entitled to be treated for tax purposes as a corporation. The Treasury Department contested the case, but was unsuccessful. Despite the fact that it lost the case, the Treasury Department refused to accept the decision of the court and promulgated regulations which deny to unincorporated professional associations the same tax treatment as corporations. After the regulations were issued a number of states enacted professional corporation statutes for the purpose of avoiding the thrust of the regulations. Thereupon, the Treasury Department in 1965 issued a second set of regulations which in substance provided that professional corporations, as well as unincorporated professional associations, cannot be taxed for Internal Revenue purposes as a corporation unless "the corporate characteristics are such that the organization more nearly resembles a corporation than a partnership or trust."

Since the 1965 regulations were issued the Treasury Department has lost

six lawsuits in the Federal Courts involving the validity of the regulations. The most recent case was Lawrence G. Empey vs. United States Of America, a case won by a lawyer-taxpayer in the District Court of Colorado and affirmed by the Tenth Circuit Court of Appeals. Nevertheless, the Treasury Department has not yet abandoned its position, and the battle will continue until it is compelled to surrender by legislation or a final salvo from the Supreme Court.

Tennessee does not yet have a statute permitting the formation of professional corporations, but since 1961 Tennessee has had a professional association law which makes it lawful for licensed professional personnel to form an association having certain specified characteristics of a corporation. At the present time, Representative Ben Longley of Bradley County is working on legislation which will give Tennessee a comprehensive professional corporation law. Such legislation will be introduced either in the 1969 session of the General Assembly or in the 1970 session. It will undoubtedly contain a provision that a professional association chartered prior to the effective date of the legislation may be converted to a professional corporation. While the Tennessee professional association law permits only two or more practitioners to form an association, the proposed professional corporation law (to be patterned after the law of Florida) would permit a solo practitioner to incorporate and to derive such tax advantages therefrom as his particular situation would permit.

Until such time as the Tennessee General Assembly enacts a more comprehensive law, physicians considering the formation of a professional association should proceed cautiously and each group should consult its attorney and be guided by his recommendations. A professional association, or a professional corporation for that matter, may or may not serve the best interests of a particular group.

A word about ethics would seem to be in order. The Judicial Council of the American Medical Association has declared that it is within the realm of ethical propriety for physicians to join together in partnerships, associations, or other lawful groups, provided that the ownership and management of the affairs of the group remain in the hands of licensed physicians. One of the problems arising in connection with the formation of an association or corporation is the use of a name other than a partnership type name. The Law Department of the American Medical Association has recently suggested informally that the use of any name other than a partnership type name should be cleared with the Ethics Committee of the local medical association.

* * * * *

GENERAL ASSEMBLY IN FULL SWING . . . The 86th Tennessee General Assembly reconvened February 25th and will meet until May 9th utilizing 45 of the 90 legislative days available to them. Plans call for duplicate session to convene January 13, 1970. A TMA endorsed bill has already been favorably acted upon and another is expected to see action soon. A proposal to establish a Uniform Anatomical Gift Act successfully passed both the House and Senate and now awaits Governor Ellington's signature. A bill which would permit minors to seek treatment for venereal diseases without parental consent is pending in both houses. Efforts to delay implementation of Tennessee's Medicaid program from July 1, 1969 to January 1, 1970 is being opposed by TMA.

* * * * *

DRUG ABUSE EDUCATIONAL EFFORTS ENCOURAGED . . . TMA's Committee on Mental Health has distributed comprehensive Drug Abuse Information Kits to the Presidents of each County Medical Society in an effort to stimulate the development of local public education programs on drug abuse. These kits contain all the basic materials needed to formulate a full-scale program and will be augmented by AMA's national publicity.

President's Page

CHEERIO!



Dr. Newell

This has been an interesting and busy year for me. As the title of this message indicates, cheerio expresses my personal feeling for our organization. For some of you, like myself, who are not too versed with the English language, cheerio is a colloquial word according to Webster's Collegiate Dictionary which means "hello" and "good luck" as well as "good-bye."

It has been my privilege to serve as your 80th President. As others before me, I want to express my thanks to the House of Delegates for electing me to this high honor. I would also be remiss if I did not again express my thanks to the Chattanooga-Hamilton County Medical Society for submitting my name in nomination.

To the many physicians who devoted so much time to the work of our important committees, much credit is due. These men devoted untold hours developing TMA programs for the benefit of the public and the physicians of Tennessee. Particular credit should go to the hard working officers, members of the Board of Trustees and the well qualified TMA executive staff. By the time this message goes to press, you will have a new president, Dr. Francis H. Cole of Memphis. Besides pledging him my support in every way, my previous friendship and association with him makes me feel the association has chosen a wise and dedicated leader.

I hope some of you have enjoyed my messages in the Journal as much as I have enjoyed writing them. They express frankly and sincerely my opinions as a doctor and President of the TMA in our changing times. I should like to repeat the titles for this issue:

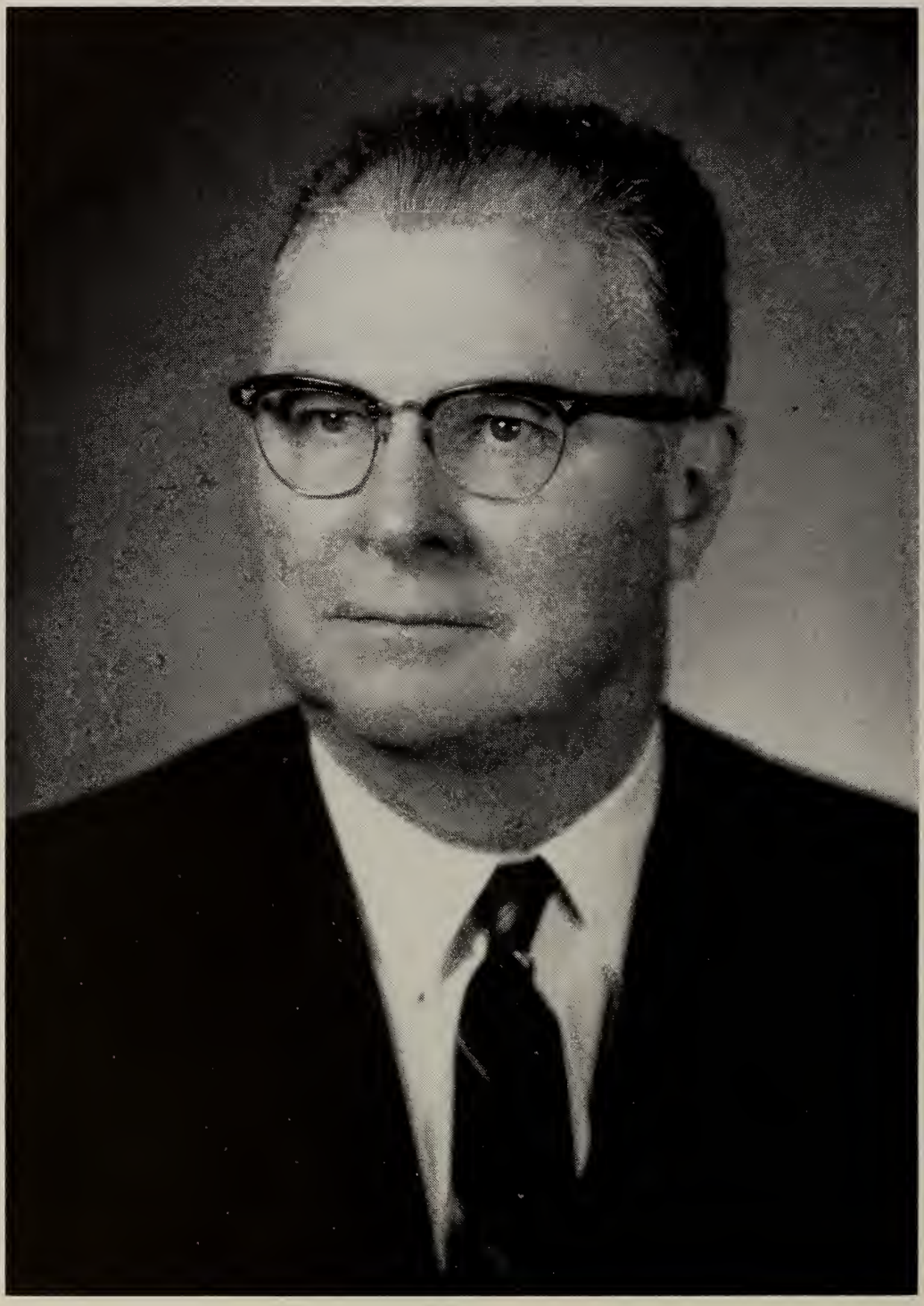
1. Our Changing Times—May
2. Our Responsibility As Voting Citizens—June
3. A Look Into the Future—July
4. Medical Ethics—August
5. Some Observations on European Medicine—September
6. Leadership Conference—October
7. Emergency Health Care—November
8. A Christmas Legend—December
9. TMA Headquarters in Nashville—January
10. Medical Society Unity—February
11. Physician Self Education—March

Sincerely,

Edward T. Newell Jr.

President

The New President



FRANCIS H. COLE, M.D.

MEMPHIS

Francis H. Cole, M.D.

81st President, Tennessee Medical Association

ON APRIL 11, 1969, Dr. Francis H. Cole took office as the 81st President of the Tennessee Medical Association, at the annual meeting in Gatlinburg.

Dr. Cole has practiced thoracic surgery since January 1, 1947. Born April 5, 1916, in Jacksonville, Florida, he attended elementary and high school in Salley, South Carolina.

After a 3-year pre-medical course at the College of Charleston, South Carolina, from 1932 to 1935, he entered the Medical College of South Carolina in Charleston, receiving his Bachelor of Science in Medicine degree in 1936, and his M.D. degree in 1939. A rotating internship in the Public Health Service Hospital in New Orleans was followed by one year of employment in the Tennessee State Public Health Department.

A residency in pulmonary diseases in the Davidson County Tuberculosis Hospital in Nashville, in 1941 and 1942, was followed by a period of service in Memphis at the Public Health Department and the Oakville Memorial Tuberculosis Hospital. His postgraduate residency training was completed with two years in thoracic surgery at Bellevue Hospital in New York City (1945-46).

Dr. Cole moved back to Memphis in January, 1947, where he has practiced ever since. He became director of the surgery service at the West Tennessee Tuberculosis Hospital, where he continues to serve in that capacity. In December, 1948, Dr. Cole began a private practice in Memphis in association with Dr. Franklin Alley.

Dr. Cole's hospital appointments as attending thoracic surgeon include the Methodist, St. Joseph, City of Memphis and William F. Bowld Hospitals. He is associate clinical professor in the Department of Surgery at the University of Tennessee College of Medicine.

His organizations include: Fellow of the College of Surgeons and the College of Chest Physicians, member of the American Thoracic Society, American Association for Thoracic Surgery, Southern Thoracic Surgical Association and the Memphis and Tennessee Thoracic Societies and the Memphis Surgical Society. He has been president in his local and state thoracic societies and vice president of the Southern Thoracic Surgical Association.

Dr. Cole's Club memberships include Memphis University Club, Delta Sailing, and Turtle Point Yacht and Country Club.

His favorite hobby is sail boating, both cruising and competitive, in which his family has an active interest.

Dr. Cole was married to the former Mary Ellen Tiedeman, Charleston, South Carolina in 1941. They have two daughters and son, Francis H. Cole, Jr., who is an intern at Los Angeles County General Hospital. Dr. Cole is a member and Elder of the Evergreen Presbyterian Church in Memphis.

Dr. Cole always searches for a better way to do things, and the year 1969 under his presidency may well become a year of better methods in the Association's own sphere of influence.

J. E. B.

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APRIL, 1969

EDITORIAL

COMA IN DIABETES MELLITUS

During the past few years, possibly as the result of better management of diabetes mellitus with resultant decrease in diabetic ketoacidosis with coma, it has become increasingly evident that coma of other etiologies is seen with this disease. Danowski[1] writes that the various types of nonketoacidotic coma in diabetes mellitus fall into several groups: (1) coma in a diabetic patient as a result of a stroke, drug excesses, uremia, liver disease, etc., (2) insulin hypoglycemia, (3) lactic acidosis with coma, (4) hyperosmolar coma and (5) possible combinations of the preceding types.

The first type only necessitates recognition that a diabetic patient can develop coma for any of the reasons which may cause unconsciousness in a nondiabetic individual. This category comprises patients who develop a cerebrovascular accident, circulatory collapse, salicylate or barbiturate poisoning, uremia, hepatic coma, etc., for reasons not immediately referable to the diabetes itself. In other words there are patients in coma who incidentally have diabetes mellitus.

The second type occurs in patients with diabetes mellitus who have developed hypoglycemia due to excessive insulin or oral sulfonylurea therapy.

Patients with lactic acidosis comprise the third type. These patients have usually been in severe circulatory collapse, although ingestion of alcohol in excess, lactic acid infusions or prolonged therapy with vasoconstrictive agents of the epinephrine or nonepinephrine types may play a precipitating or aggravating role. The common denominator seems to be tissue hypoxia and chemically there is an increase in lactic acid, a resultant lactate-pyruvate ratio higher than 10 to 1 and a decrease in plasma bicarbonate.

Recently there has been increased interest, since its initial description ten years ago, in the fourth type which includes patients who have developed hyperosmolarity associated with hyperglycemia and dehydration in the absence of ketoacidosis. Most patients are over fifty years of age and approximately three-fourths have previously unrecognized diabetes mellitus. They have usually had polyphagia, polyuria and polydipsia for weeks or months which has gone unrecognized often because other illnesses have been present. Frequently the disorder is first noticed when a disturbance of conciousness or focal or generalized seizures occur. Abdominal pain, fever and leucocytosis also may be present. The condition is diagnosed by the demonstration of marked hyperglycemia with blood levels usually in the range of 1,000 to 2,000 mg. per 100 ml. in the absence of complicating lactic acidosis or hyperketonemia. There is gross evidence of dehydration and increased serum osmolarity, increased hematocrit and elevation of blood urea nitrogen. The mortality remains about 40 per cent. At autopsy the significant findings include the presence of widespread intravascular clotting, and in approximately 20 per cent of cases evidence of pancreatitis.

Although the pathogenesis of this condition has not been established, it seems likely that this syndrome may represent the development of clinical symptoms of matur-

ity-onset diabetes under circumstances which permit the development of severe dehydration. The presence of other disease states which can contribute to dehydration or impair urinary excretion of glucose would be expected to predispose to its development.

Johnson, and associates[3] have recently suggested a plan of therapy which emphasizes the following principles of management: (1) early recognition and treatment; (2) soluble insulin in adequate amounts and frequently; (3) rapid infusion of hypotonic solutions initially, followed by the use of 5 per cent dextrose are essential; and finally, (4) an appreciation that some depletion of body potassium has already occurred and that hypokalemia may be precipitated by the large amount of carbohydrate metabolized which will accompany the supplying of adequate amounts of insulin.

Recognition that mechanisms other than ketoacidosis may be responsible for the development of coma in diabetes mellitus is necessary for prompt institution of therapy and the saving of lives.

A.B.S.

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2. Tyler, R. H.: Hyperosmolar Coma, Am. J. Med. 45: 485, 1968.

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PROGRAMS AND NEWS OF MEDICAL SOCIETIES



New Members

The Journal takes the opportunity to welcome these new Tennessee Medical Association members.

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE
B. G. Thompson, M.D., Trenton

GREENE COUNTY MEDICAL SOCIETY
Robert Cooper, M.D., Greeneville
B. D. Holt, M.D., Greeneville

KNOXVILLE ACADEMY OF MEDICINE
Carl E. Godfrey, M.D., Knoxville
Charles Reid Roberts, M.D., Knoxville
Jack Rule, M.D., Knoxville
John B. Wofford, M.D., Knoxville

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY
Joseph Calloway Boals, III, M.D., Memphis
Robert M. Charm, M.D., Memphis
Federico Jorge Fuste, M.D., Memphis
William Gordon Jennings, M.D., Memphis
Van H. Wells, M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE
Duncan A. Killen, M.D., Nashville

NORTHWEST TENNESSEE ACADEMY OF MEDICINE
James R. Noonan, M.D., Dyersburg

ROANE-ANDERSON COUNTY MEDICAL SOCIETY
Marjorie J. Swint, M.D., Oak Ridge

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL SOCIETY
William J. Cone, M.D., Johnson City

WILLIAMSON COUNTY MEDICAL SOCIETY
Fulton M. Greer, Jr., M.D., Franklin

Roane-Anderson County Medical Society

Dr. Edward Bird, associate professor of medicine, Bowman Gray Medical School, Winston-Salem, N. C. was guest speaker at the meeting of the Roane-Anderson County Medical Society on February 25th. His subject was "Unsuspected Pituitary Deficiency." The dinner meeting was held in the cafeteria of the Oak Ridge Hospital.

Knoxville Academy of Medicine

The program for the meeting of the Academy on March 11th was a panel discussion on "Patient-Nurse Relationships." Members of the panel were the Directors of Nursing Service of the Knoxville Hospitals and Sister Mary Assissium, Director of Patient Relations, St. Mary's Memorial Hospital.

A meeting of the Delegates and Alternate Delegates to the Tennessee Medical Asso-

ciation followed the Academy meeting to organize and discuss matters to be considered at the TMA Annual Meeting in Gatlinburg, April 10-12.

Memphis-Shelby County Medical Society

The Memphis and Shelby County Medical Society met in regular session in the Auditorium of the Institute of Pathology, University of Tennessee, on March 4th. The scientific program was presented by Dr. Charles E. Kossmann, professor of medicine, chairman of the Division of Circulatory Diseases at the University of Tennessee. Dr. Kossmann spoke on "The Selection of the Patient for Surgical Treatment of Coronary Artery Disease."

Putnam County Medical Society

The Putnam County Medical Society held a dinner meeting recently at the Holiday Inn in Cookeville. Members of the Cumberland, White, Jackson, and Overton County Societies, local pharmacists and dentists, were invited to hear the program which was sponsored by the 1969 Putnam County Heart Fund Drive. The heart team from St. Thomas Hospital, Nashville, Drs. William S. Stoney, George R. Burris, William Alford, Jr., and Harry Page presented the program.

NATIONAL NEWS

The Month in Washington
(From Washington Office, AMA)

The American Medical Association told Congress that the Internal Revenue Service acted arbitrarily and completely ignored the facts in imposing a tax on revenue from drug advertising in journals of tax-exempt medical associations. Bernard D. Hirsh, AMA general counsel, testified before the House Ways and Means Committee, that the relation between the tax-exempt purposes of a medical association, national or state, and the drug advertising in its journal is self-evident.

"Drug advertising alerts and stimulates the physician's interest in new drugs as they become available, and also serves to remind him of the broad spectrum of useful time-proven drugs," Hirsh said. "Obviously physicians should not and do not rely upon drug advertisements as their principal source of information, but drug advertisements often provide an important step in the process through which physicians become educated in the therapeutic value and risks of new drugs and a wider variety of useful drugs. . . . No other advertising provides as much complete and objective information."

Hirsh said the IRS regulations taxing medical associations on their advertising revenues represents an attempt to change the law without congressional action. The IRS officials made a mistake, he said. "We urge that this mistake be rectified expeditiously and in the most practical way possible."

Spokesmen for numerous other tax-exempt associations joined the AMA in opposing the tax on their advertising revenues. These included the American College of Physicians, the American College of Obstetricians and Gynecologists, The American Psychiatric Association, the American Dental Association, the Boy Scouts of America, the Girl Scouts of America, the American Chemical Society and the Society of National Association Publications.

Representatives of commercial publishing firms contended in testimony before the committee that the previous tax exemption gave the journals of the associations an unfair advantage in competition for advertising dollars. When the IRS announced the new tax regulations 15 months ago, it stated that the purpose of the regulations was not to raise federal revenue but to remove a competitive advantage of the tax-exempt associations.

In an announcement not directly connected with the House committee hearings, the IRS said it also is considering taxing the income tax-exempt associations get from rental of exhibit and display space at conventions.

★

A special advisory committee urged an extensive national program to combat alco-

holism. The National Advisory Committee on Alcoholism said in an interim report that attention should be given to alcoholism problems in all federally supported health and welfare programs. The committee also recommended:

Elimination by hospitals of discriminatory policies denying admission to alcoholic patients; health insurance coverage for alcoholics; increase support for research; prevention and control of alcoholism as a vital part of national highway safety programs.

The advisory committee provides advice and guidance to the Secretary of Health, Education and Welfare concerning the department's activities related to alcoholism. Robert Straus, Ph.D., professor of medical sociology at the University of Kentucky Medical School, is chairman of the committee. It was created in October, 1966. Its members represent all sections of the country and include experts from the fields of medicine, psychiatry, sociology, vocational rehabilitation, law, and public health.

"The magnitude of the problem is enormous," Dr. Straus said. "Our country has more than five million alcoholics. Their suffering alone is intolerable, but the need for increased action is made even more imperative by the fact that affected families may include as many as 20 million Americans." He also pointed out that alcoholism has a tremendous impact on business, causing absenteeism and loss of productivity.

★

The National Institute of Mental Health awarded a first-year grant of $250,000 for a major alcoholism research program at the State University of New York, Downstate Medical Center, New York, N. Y.

The five-year program will include experimental and clinical studies, training, and drug trials. In one study, 60 newly admitted patients between the ages of 25 and 55 with at least a five-year history of alcoholism will be studied to determine the effects of experimentally induced intoxication and withdrawal on the subjects' sleep patterns, behavior and biochemistry. The investigators will focus upon the mechanisms underlying the development of physical and psychological dependence.

Among the drugs to be tested are haloperiodol, dexoxadrol, disulfiram (Antabuse), paraldehyde and chlordiazepoxide alone and in combination with a tranquilizer and an antidepressant.

★

Rep. Ancher Nelsen (R., Minn.) has introduced legislation calling for the same federal tax treatment for professional corporations of physicians organized under state law as for business corporations. "We are overdue in acting to guarantee this same right of organization to professional persons that we have always given other forms and types of businesses," Nelsen told the House.

He noted that the federal government's so-called Kintner regulations issued in 1960 primarily keyed taxation of professional corporations to state law.

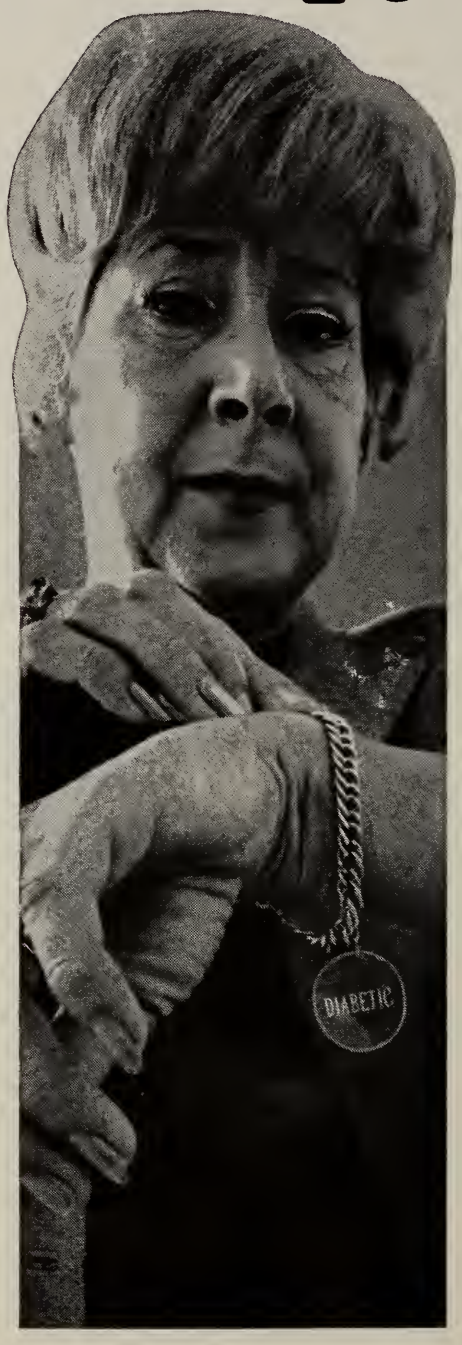
"As a result," he said, "many states, Minnesota included, passed laws enabling incorporation under these regulations. Assuming the air was cleared, many corporations were formed. However, in 1965, the Internal Revenue Service issued new regulations reversing its position, which if upheld, make it almost impossible to create a professional corporation, regardless and in spite of state laws permitting the same.

"No business can operate without some basis of continuity of the ground rules. If any set of rules should be stable, the rules governing the basic tax classification of businesses for tax purposes should be stable and not subject to administrative whim. Businesses, almost without exception—except for the professions with which this bill deals—are now allowed to decide whether to adopt the partnerships, association or corporate form under applicable state laws. There is no logical reason for denying this choice to persons who are rendering personal services in the medical or legal fields. Fairness and equity in application of the federal income tax laws demands that all businesses be treated alike in this sense.

"The only apparent reason for the 1965 amendments to the regulations was to prevent a possible reduction in federal revenues. I am certainly convinced that this is not an adequate reason for ignoring years of legal precedent and congressional intent

a broad-spectrum antibiotic for the diabetic:

threat or therapy?



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Contraindications: The drug is contraindicated in patients hypersensitive to its components.
Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).
Precautions: Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months.
Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur.
Usual Adult Dosage: 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.
Supplied: Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin.
For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles. **A.H.F.S. Category 8:12**

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in this field. Furthermore, the providing of health, pension and profit-sharing plans through tax incentives under the corporate structure is a worthy objective and a legitimate use of the tax laws. Indeed, I am advised that any possible total tax revenue loss will be minimal when it is realized that most profits will be ultimately taxable, even though such taxation might be immediately deferred.

"The position taken by the Internal Revenue Service in 1965 is untenable. It violates fairness, equity, reasonableness, years of legal precedent, and the intent of Congress as to the tax treatment of business organizations operating legitimately under state law. I would urge all my colleagues to support hearings and passage of this needed legislation at the earliest possible date."

★

Sen. Clinton Anderson (D., N.M.) introduced a bill to tie medicare and medicaid payments to hospitals and nursing homes to local Blue Cross allowances. The bill compliments a measure introduced by Senator George D. Aiken, (R., Vt.) earlier this year which ties physicians' charges to Blue Shield schedules. Aiken co-sponsored Anderson's bill. Co-sponsoring both bills are Sen. Mike Mansfield, (D., Mont.) and Sen. Winston L. Prouty (R., Vt.). Anderson co-sponsored Aiken's bill.

Anderson also said he supports the idea of Sen. John J. Williams (R., Del.) that Congress should give medicare and medicaid programs a close look, perhaps a full-dress investigation.

MEDICAL NEWS IN TENNESSEE

University of Tennessee College of Medicine

Dr. John T. Riggin of the University of Arkansas Medical Center has been named associate dean of academic affairs at the U.T. College of Medicine, effective July 1. Dr. Riggin's principal task will be revision of the teaching program, part of the college's long-range development. One of the objectives will be more emphasis on the social and behavioral aspects of medicine. Dr. Riggin earned his medical degree at Johns Hopkins School of Medicine in 1951 and served on the school's faculty from 1953 to 1955. He served his internship and residency at Johns Hopkins. He has been on the Arkansas faculty at Little Rock since July, 1955. He served as assistant dean and then associate dean of medicine, returning to fulltime teaching in 1964.

★

The only course in the United States devoted exclusively to otolaryngological allergy was held in a postgraduate Seminar at U.T., March 3-7. Directed by Dr. Sam H. Sanders, professor and chairman of the division of otolaryngology, U.T. Medical Units, the visiting faculty included Dr. D. Eugene Cowan, University of Colorado Medical Center; Dr. Kenneth L. Craft, University of Indiana School of Medicine; Dr. Sylvester C. Missal, Western Reserve School of Medicine; Dr. Charles H. Lee, St. Joseph, Missouri; and Norman E. Holtzclaw, Atlanta, Georgia.

Dr. Sanders is a former president and director of the International Society of Eye, Ear, Nose and Throat; former president of the Tennessee Academy of Ophthalmology and Otolaryngology; and has served as chairman of the American Medical Association Section on Laryngology, Rhinology and Otology.

★

The Memphis Regional Medical Program is sponsoring a new study to discover the prevalence of skin cancer and premalignant changes of skin, in Tipton County. Dr. E. William Rosenberg, professor of medicine and head of the division of dermatology at the U.T. Medical Units, is supervising the project in which Mrs. Ann Jennings, registered nurse with the MRMP, will conduct door to door samplings and interviews. Local physicians in Tipton County will report patients with skin cancer seen in their offices. These reports will be compared with the door to door survey to establish a ratio of the prevalence of the disease to treatment of the disease.

Since skin cancer can be cured about 95 percent of the time when detected early

enough, the problem is in reaching rural residents, who are often "underutilizers" of private medical facilities, and have them seek treatment earlier. The study is expected to take approximately one year.

★

The American Cancer Society has awarded a grant of $28,754 to the Medical Units to support the study of "Mechanism and Control of Antibody Synthesis" by Dr. Jason L. Starr. Dr. Starr, professor of medicine, endocrinology, is a graduate of Harvard Medical School, formerly an American Cancer Society Fellow and Associate in Medicine at Northwestern University Medical School and a Senior Investigator, Arthritis and Rheumatism, who joined the U.T. faculty in 1965. His studies will be applicable to the study of diseases in which specific proteins, such as immunoglobulins, are produced in excessive amounts and also apply to studies of normal protein synthesis.

★

A grant of $442,000 from the U. S. Public Health Service has been made to the Anatomy Department, University of Tennessee Medical Units. The five-year grant will continue and expand the graduate program in anatomical sciences, in the training of predoctoral and postdoctoral students. The need for anatomists in research and in teaching fields with advanced training has accelerated with the rapid scientific and technical advances of today. This program at the UT Medical Units is becoming increasingly well known, with its graduates already serving in outstanding colleges and medical centers of the United States. This program is a part of the Graduate Program —Medical Sciences, directed by Dr. Roland Alden, Dean of the College of Basic Medical Sciences, U.T. Medical Units.

★

Four members of the clinical faculty in radiology have been named fellows of the American College of Radiology: Dr. James L. Booth, clinical assistant professor; Dr. Boyer M. Brady, Jr., clinical associate professor; Dr. Allen E. Greene, Jr., clinical professor; and Dr. Hollis H. Halford, Jr., clinical assistant professor.

Auto Crash Injury Research Program Nears Completion

The last "six-months" phase of an intensive four-year research study aimed at helping to make automobiles safer for drivers and passengers began March 1st in the Tennessee Highway Patrol District No. 1, headquarters in Knoxville. Counties included in the district include Monroe, Anderson, Blount, Campbell, Knox, Loudon, Morgan, Roane, Scott, Sevier and Union. The research study will continue through August 31st.

Members of the Tennessee Highway Patrol and staff physicians of participating hospitals are cooperating with the Automotive Crash Injury Research project of Cornell Aeronautical Laboratory, Inc. in a special study of automobile accidents. Special forms are used to report the nature and extent of injuries and the precise causes of injuries sustained by occupants of passenger cars involved in accidents. Tennessee became the 30th state to enter this interstate research effort when the program was inaugurated on September 1, 1965.

Also cooperating in the study are the Tennessee State Department of Public Health, the Tennessee Medical Association, and the Tennessee Hospital Association. The primary objective of the ACIR program is to study the relationship between automotive design and injuries sustained by occupants. It is estimated that thousands of American motorists may already have been saved from injury or death by the application of Cornell data to engineering safety designs aimed at increasing passenger protection.

Annual Barney Brooks Lecture at Vanderbilt University

Dr. Nathan A. Womack, professor of surgery and chairman emeritus of the University of North Carolina Medical School's surgery department, discussed "Blood Flow Through The Stomach," at the 17th annual Barney Brooks Memorial Lecture in Surgery on March 7th in the Vanderbilt Medical Center amphitheater. The Barney Brooks Lectureship was established as a memorial to Dr. Brooks, who died in 1952.

He had been professor of surgery and chairman of the surgery department at Vanderbilt University from 1925 to 1951.

PERSONAL NEWS

Dr. James O. Stewart, Nashville, will be installed as a fellow of the American College of Obstetricians and Gynecologists at its annual meeting in April.

Dr. Wallace D. Grissom, a native Tennessean, has been appointed to the full-time staff of Newell Clinic Hospital Inc. and will be in charge of orthopedic surgery. Dr. Grissom will be an associate of Dr. Edward T. Newell, Jr., Dr. J. Marsh Frere, Sr., Dr. Rudolph M. Landry, Dr. Robert E. Mabe and Dr. Nat H. Swann.

Dr. Marcus J. Stewart, Memphis orthopedic surgeon, was a guest speaker at the annual Southern District convention of the American Association for Health, Physical Education and Recreation, held recently in Nashville. Approximately 1,000 delegates, coaches, physical education teachers and recreation personnel from high schools and colleges, attended the five-day convention. Dr. Stewart's subject was "The Rehabilitation of the Athlete."

Dr. Walter Mason, formerly of Memphis, has become associated with **Dr. David Patterson** in Greeneville. Dr. Mason is a Diplomat of the American Board of Surgery. He graduated from the University of Tennessee Medical School in 1957; interned at Roanoke Memorial Hospital; gained 2½ years experience in flight surgery with the Navy; practiced briefly in Middlesboro, Ky.; and for the past two years has worked in general surgery at the VA Hospital in Memphis.

Dr. Julian K. Welch, Jr., Brownsville, has been appointed to a one-year term on the Mead Johnson Awards Committee of the American Academy of General Practice. The seven-man committee is responsible for administering an annual $12,000 grant to the Academy from Mead Johnson Laboratories, Inc., to aid young physicians in completing a year of family practice residency training. Twelve award winners are chosen each year by the Committee.

The following were made Fellows of the American College of Radiology at its February meeting: **Drs. James L. Booth, Boyer M. Brady, Jr., Allan E. Green, Jr., Hollis H. Halford, Jr., Willard J. Howland, Jr.,** Memphis, and **William R. Mitchum; Dr. William A. Nelson** of Knoxville.

Dr. B. L. Holladay, general practitioner and anesthetist, formerly of Linden, has joined the staff of the Clinic in Centerville. **Dr. Lloyd Jones** left the Clinic on March 21st to assume a residency at Scott-White Memorial Hospital and Clinic in Temple, Texas to further his training in internal medicine.

Dr. Roger L. Hiatt, associate professor of ophthalmology, U. T. Medical Units, Memphis, was a member of the guest faculty of the University of California, San Francisco Medical Center, in a postgraduate program on eye care for children. He presented a course in "Special Problems in the Evaluation and Refraction of Children."

Dr. Sam B. McFarland, Lebanon, has been named president-elect of the Alumni Association of David Lipscomb College, Nashville.

Dr. Wallace B. Bigbee has moved his office to the McMinnville Plaza Professional Center and is associated with **Dr. Thurman L. Pedigo** in the general practice of medicine and surgery.

Dr. Jesse E. Adams, Chattanooga, discussed advances in heart surgery at a recent meeting of the local Kiwanis Club.

Dr. William G. Kennon, Jr., Nashville, has been elected as a Fellow in the American Laryngological, Rhinological and Otological Society, which convened in New Orleans, in March.

Doctors William C. Alford, Jr., Robert N. Sadler, George R. Burrus and **William S. Stoney,** Nashville, announce their association in the practice of cardiac, vascular, thoracic and general surgery.

ANNOUNCEMENTS

Calendar of Meetings, 1969

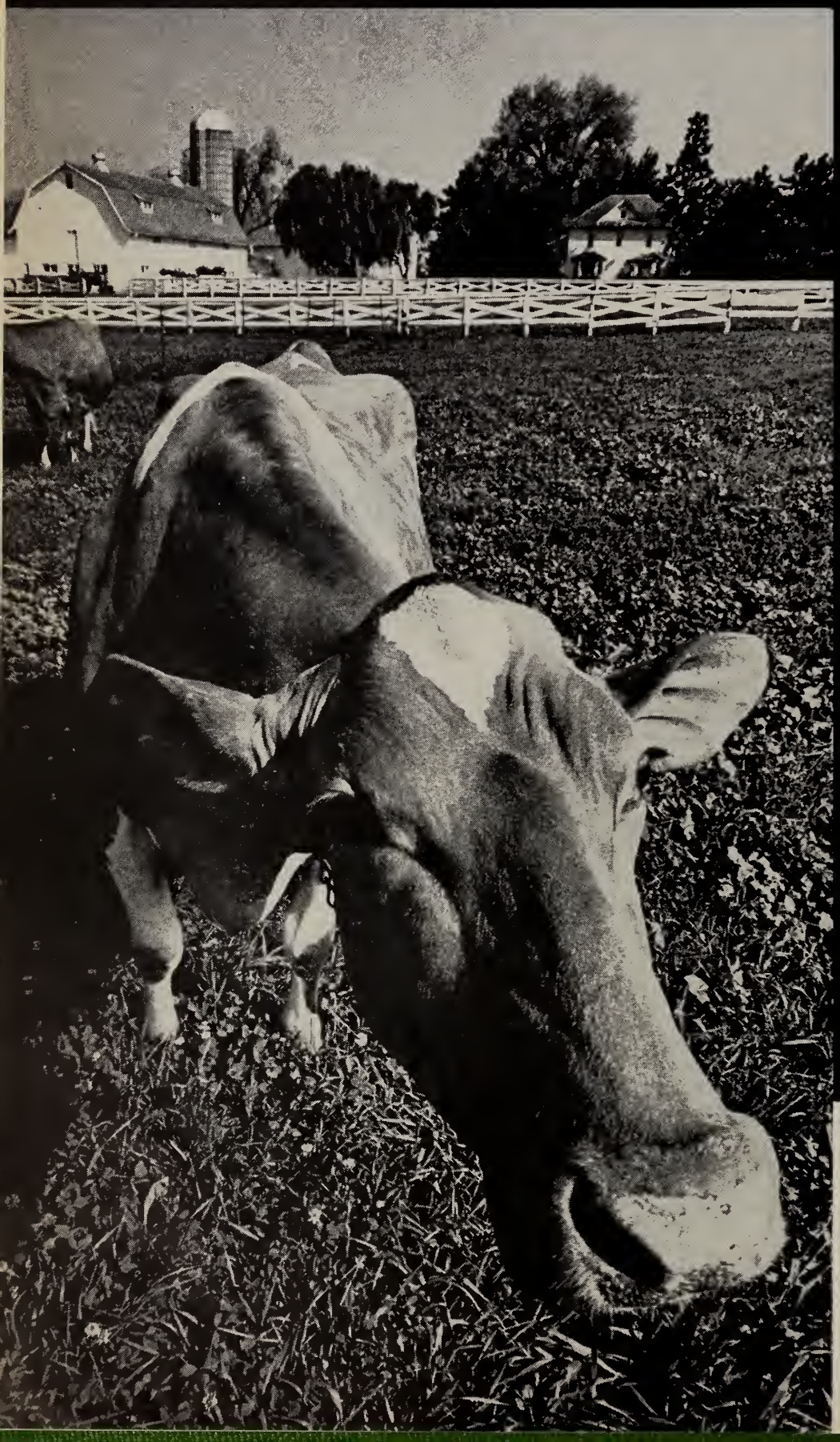
State

May 15	Middle Tennessee Medical Association, Springfield
May 21-23	Mid-South Medical Association (Formerly Mid-South Post-Graduate Medical Assembly), Holiday-Inn Rivermont, Memphis
June 17-18	Upper Cumberland Medical Society

National

May 3	American College of Psychiatrists, Bal Harbour, Florida
May 5-7	American Gynecological Society, Royal Orleans Hotel, New Orleans
May 5-9	American Psychiatric Association, Americana Hotel, Miami Beach, Florida
May 6-7	Association of American Physicians, Haddon Hall, Atlantic City, N. J.
May 7-9	American Association on Genitourinary Surgeons, Del Monte Lodge, Pebble Beach, Calif.
May 12-14	American Society for Gastrointestinal Endoscopy, Shoreham Hotel, Washington, D. C.

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APPALACHIAN AREA
Bristol, Tennessee

DAIRY COUNCIL OF CHATTANOOGA
DAIRY COUNCIL OF KNOXVILLE
MEMPHIS DAIRY COUNCIL
DAIRY COUNCIL OF NASHVILLE

May 12-15	American Urological Association, Hilton Hotel, San Francisco
June 2-5	Southwestern Surgical Congress, Sahara Tahoe Hotel, Lake Tahoe, Nevada
June 2-6	American College of Allergists, Hilton Hotel, Washington, D.C.
June 9-11	American Neurological Association, Beverly Hilton, Los Angeles
June 16-19	American Proctologic Society, Statler Hilton, Boston
June 20-22	American Association of Neuropathologists, Park Plaza Hotel, New Haven, Conn.
June 23-26	American Orthopaedic Association, The Homestead, Hot Springs, Va.
June 28-29	American Diabetes Association, Hotel Roosevelt, New York
July 12-13	Society for Surgery of the Alimentary Tract, Barbizon Plaza, New York
July 12-13	Society for Vascular Surgery, New York
July 13-17	American Medical Association, New York

Cancer Films Available

The American Cancer Society has embarked on the most ambitious film program for professional medical audiences ever launched against a single disease. A half-million dollar film project is underway—with technical advice from the nation's leading medical authorities. Twelve of these 16 mm, color, films are available now—

Cancer in Children—The Tumor Board at a children's hospital discusses a child with Wilm's Tumor, the detection of the tumor, the diagnostic procedures and management adopted. Also deals with cases of neuroblastoma, intracranial neoplasms, leukemia and rhabdomyosarcoma. Time—27 minutes.

Cancer of the Skin—Demonstrates the differential diagnosis of skin neoplasms. Suspicious and characteristic lesions are identified to aid in distinguishing basal cell carcinoma from squamous cell carcinoma, and in differentiating these from other skin lesions, both benign and malignant. Time—18 minutes.

Cancer of the Stomach—Depicts the role of symptoms and signs, barium radiotherapy, and gastric analysis in arriving at a diagnosis of gastric cancer. The importance of early diagnosis and adequate therapy are demonstrated, as well as the role of pathology in determining the course and results of treatment. Time—20 minutes.

The Dentist and Cancer—Shows how dentists can help toward improving the cure rate and diminishing suffering from oral cancer in thousands of patients by giving special attention to the disease in their daily practices. Time—21 minutes.

Diagnosis and Management of Cancer of Colon and Rectum—Demonstrates the diagnosis and treatment of both symptomatic and asymptomatic cancer of the colon and rectum; shows endoscopic motion pictures of malignant lesions and of the healthy colon; brings out the inadequacy of the digital examination alone; and stresses the importance of routine proctosigmoidoscopy and the quaic test for asymptomatic patients, supplemented by barium enema when indicated. Time —17 minutes, 10 seconds.

Diagnosis and Treatment of Cancer of the Prostate—Emphasizes routine palpation of the prostate gland by rectal examination in early detection, in relation to the high incidence of unsuspected prostate cancer. The natural history of prostatic cancer and the paths of metastasis are shown. Time—18 minutes.

Early Diagnosis and Management of Breast Cancer—Demonstrates the essentials of a thorough periodic examination for early breast cancer, depicts the signs of cancer, and emphasizes the importance of the detection of tumors while they are still small. Presents the physiologic characteristics of breast cancer which promote early metastasis, and the cyclic changes in the breast which complicate diagnosis. The indications for mammography are covered as well as the limitations of both mammography and thermography. A positive approach to prosthesis, rehabilitation and follow-up is presented. Time—19 minutes, 30 seconds.

Hormone Therapy for Advanced Cancer—Presents the role of hormone therapy for disseminated, inoperable or recurrent cancer of the breast, endometrium and prostate. Criteria are presented for selecting patients and for assessing responses. Time—21 minutes.

Nursing Management of the Patient with Cancer —Shows in detail the nursing procedures used when patients experience laryngectomy, tracheotomy, colostomy or cystectomy. Time—29 minutes.

Oral Cancer—Demonstrates a five-minute visual and digital oral examination for cancer as part of the routine physical examination of an asymptomatic patient. Various oral lesions are shown. The importance of biopsy is emphasized and several biopsy techniques are shown. Time —22 minutes.

Tumors of the Major Salivary Glands—Illustrates the differential diagnosis and management of tumors of the major salivary glands: Parotid; sub-maxillary and sublingual. The indications and contra-indications for biopsy are covered, and the principles of surgery and end results of treatment are reported. Time—15 minutes, 30 seconds.

Uterine Cancer: Diagnosis and Management— Part I—Cancer of the Cervix demonstrates the

technique of pelvic examination, including cytology. Etiologic factors are discussed, and symptoms, signs and diagnostic procedures are demonstrated, including cone biopsy. The principles of treatment by surgery or radiotherapy are presented, including factors affecting the selection of surgical procedures. Time—20 minutes.

Part II—Cancer of the Endometrium presents the signs and symptoms of this disease. Endometrial biopsy both by aspiration and by dilation and currettage is shown. The film demonstrates radiation therapy and surgical treatment, and discusses indications for postoperative radiation. Time—12 minutes.

Part I and Part II may be shown on one program, or on two successive programs, or either part may be shown independently to meet audience requirements.

At least nine other new films will be released in 1969-70. As pioneers in the usage of medical films, we know their value as teaching tools. Films are a vital part of our professional education program. For further information about this outstanding new series, contact either the TMA Administrative Office, your local ACS Unit, or the American Cancer Society, Tennessee Division, Inc., 2519 White Avenue, Nashville, 37204. If necessary, the American Cancer Society will provide a projector, screen, and projectionist for the showing of these films.

How to Get Paid for Treating Military Patients

There seems to be considerable confusion among the civilian medical profession as to where and how to bill the Army for services rendered to military personnel.

Payment to civilian sources for emergency professional services rendered to military personnel who are on active duty (as contrasted to retired, or inactive members of the National Guard or Reserve) is the responsibility of the Surgeon of the geographical area in which such services are provided. Collection cannot be made from the Office for the Civilian Health and Medical Program for the Uniformed Services (OCHAMPUS), Denver, Colo., or its fiscal agents, who are responsible only for the payment of medical care rendered to authorized dependents and retired military personnel.

When a patient is identified as an Army member, on active duty, notification should be made immediately by telephone to the appropriate Army headquarters, as listed below, reporting where the individual is and the nature of the treatment required. The cost of the telephone call will be reimbursed with the other charges.

The Army headquarters will advise the caller about the administrative management of the patient, and how to submit the bills for service. The appropriate Army headquarters for Tennessee is *The Third United States Army*. Telephone Number: Area Code 404. Weekdays—752-2816 or 752-2425. Nights, weekends and holidays—752-3606 or 752-3705. Address—Commanding General, Third United States Army, Attention: Surgeon, Fort McPherson, Ga., 30330.

Postgraduate Course in Trauma

The American Academy of Orthopaedic Surgeons will sponsor a postgraduate course on trauma and disease of the upper extremity May 15-17, in Atlanta, Ga. Directing the three-day course of lectures and panel discussions for the Academy's Committee on Injuries will be Dr. Wood W. Lovell, Chief of the Department of Orthopaedic Surgery at Georgia Baptist Hospital and Surgeon-in-Chief of the Scottish Rite Hospital for Crippled Children, Decatur, Georgia.

The course for orthopaedic surgeons, general practitioners, general surgeons, and residents will be held at the Marriott Motor Hotel, Atlanta, in cooperation with Georgia Baptist Hospital. Each of the three days will be devoted to a single area, opening with the shoulder and upper arm, followed by a day on the elbow and forearm, and the closing day on the hand.

Faculty members include orthopaedists from eleven states and Canada. The program is acceptable for 22 elective hours by the American Academy of General Practice.

For application forms and further information, contact Dr. Wood W. Lovell, 340 Boulevard, N.E., Atlanta, Georgia 30312, or the American Academy of Orthopaedic Surgeons, 430 North Michigan Avenue, Chicago, Illinois 60611.

HISTORICAL NOTES

AN ADDRESS*

By CHARLES W. MILES, SR., M.D.

Mr. President and Gentlemen of the West Tennessee Medical and Surgical Association:

Through a most generous impulse on the part of your Committee on Arrangements I have been awarded the distinguished honor of greeting you as fit representatives of the noblest and most profoundly learned profession on earth and to welcome you to our little city and its hospitality.

What inspiration led to my selection I know not; for, lacking, as I do, that readiness which one of our greatest philosophers has laid down as essential to a successful public speaker, I can never hope to attain to an eloquence such as would befit an occasion like the present. I have often deplored this defect in my mental make-up but in

such moments I have found some small grains of comfort in a story I have read of a certain English Bishop who, while traveling in a third-class coach, had for a companion a man who not only swore habitually but with a volubility that at times was actually picturesque. At last the horrified Bishop could stand it no longer, and turning to the man in his righteous indignation he exclaimed: "My dear man, where on earth did you learn to swear so outrageously?" To which he replied: "I did not learn it, sir. It's a gift." And so, gentlemen, when I shall have concluded the few desultory remarks I shall address you on the present occasion, I shall find some slight consolation in the reflection that eloquence cannot be learned, it is a gift. Nay, I shall forget all my failure to measure up to your generous expectations in the remembrance of the high honor that my brethren have so kindly bestowed upon me and for which I am so deeply thankful.

Sometimes I have wondered why it should be deemed at all necessary to indulge in the formality of welcoming visiting physicians on occasions like this. You are of the same household of faith; you are a part of one great family; you are possessed of like loves, like hopes, like ambitions, and having "wedded truth for her own sweet sake" you seek the same ends and worship the same God. Hence, like the language in which you write your prescriptions, you should be known of all men and welcomed everywhere. Strictly speaking, the science and art of medicine differs in its development from all other sciences.

Our present splendid system of legal jurisprudence, both civil and criminal, owing, in the main, its earliest conceptions to that great English king, Edward the 1st, has attained to its present proportions as the result of a long and tedious process of elaboration. Year after year and century after century it has been added to as human experience and observation pointed the way until today it stands as the fit product of all the ages. The science of astronomy, that most beautiful and inspiring of all human investigation, owed its beginning to the astrological mountebank whose sole thought was to win his bread by drawing necromantic horoscopes for the credulous. It has grown and been added to by successive discoveries until, by means of that wonderful discovery called spectral analysis, we have been enabled to delineate on a white canvas the very constituent elements of stars whose distances are not only immeasurable, but even of some that human eyes have not yet seen.

Architecture, beginning in man's primitive existence when only a stone or branches broken from a tree afforded him a shelter, improved on to a certain degree by the earlier Egyptians, developed into a thing of beauty by the Greeks, and later added to and brought to a wonderful perfection by the Romans, and practically developed into a perfected science in the renaissance, is the end of centuries of elaboration.

Even our conception of God and our duties to Him have been and will continue to be subject to change with greater enlightenment and consequent higher conceptions of His Infinite goodness; for while God is God, without beginning and without ending, still no student will for one moment contend that, measured by human ideals, the God of Moses is the God of today.

The science of medicine, however, has, in many respects, a far different history. The cold and calculating hand of the iconoclast has marked its course with many a ruined monument, erected and dedicated to Truth, later to be weighed and found wanting and destroyed. I can but liken its past to the successive building of the cities of ancient Egypt.

As one crumbled and decayed under the blighting influence of time, it was succeeded and built upon through the ages by later and better, and these in turn falling into decay until their superimposed ruins have become monuments in whose depths the inquisitive archaeologist uncovers their history. And so, too, have theories and practices of medicine been builded and developed, not to stand until some later genius came upon the stage of action and added a new annex to that which had already been

*Presented at a meeting of the West Tennessee Medical Association in Union City on May 13, 1914. (This text has been contributed by Dr. J. Kelley Avery of Union City.)

erected, but to undermine it with a newer and more plausible theory until, like tottering empires, it crumbled and fell of its own weight. But at last you have builded a structure, beautiful in its proportions, and magnificent in its dimensions, with demonstrated truth for its foundation that shall stand through all the ages; and the builders, the ever patient, earnest and self-sacrificing physician stands upon its walls, just a little below the angels. He has attained to a mentality such as all the precepts of Bacon combined into one sentence would fail to lift him to a higher plane; and to go farther, to reach any higher achievement he must forsake the beaten paths of knowledge and culture, and even invade those realms of inspiration and creative power and genius whose strange mysteries pass the understanding of him who possesses them. In other words it is an analytic and synthetic wisdom which may not be taught to another, but is attained to only by the inspiration of individual genius—that gift of the Infinite One to him only who is willing to "labor and to wait."

Some poet has said: "Youth is the theme of a book unread, and age is a dream of a day that is dead." And so while you who are younger, and to whom Hope still sings that sweet song: "Tomorrow shall be as this day, and much more abundant," and while you listen to its enchanting strains and accord with all your heart, seeing visions the while of future success, it would delight me beyond measure, standing here, as I do, at the self-elected close of my professional life, and noting, as I do, life's lengthening shadows, long since falling behind, and impressed as I am that it shall never again be given me to address a like assemblage, to indulge myself in dreams "of a day that is dead." It would delight me to go back to the day of the "glory that was Greece," to the day when Plato, the wisest of his time, recommended music for the healing of broken bones, and to discuss with you the wonderful progress of both medicine and surgery. To ponder with you over the dreams of the Alchemist, his wild senseless search for a universal solvent, for the philosopher's stone, and a formula for the transmutation of metals. It would delight me to review with you that divinest of all conceptions of the medical mind, Preventative Medicine, beginning with the earliest dawn of human existence when, as so happily put by some writer, some anxious mother, seeing her child about to swallow a green berry, commanded it "to spit it out" and ending with the present day practice of immunization by inoculation. What would be the surprise and wonder of those who went before us and blazed the way of glory if they could but be aroused from that slumber that is so strangely long and silent, and behold the miracles of modern medicine and surgery. I have wondered what thoughts and reflections possessed the mind of the immortal Lister in the midst of his first antiseptic surgical operation.

I have wondered what dreams his fancy painted in rainbow tints on the changing clouds of antiseptic mist that surrounded and blurred the field of operation. Since then, how the changes have followed each other like wind driven waves at sea. I have myself seen a day when fifty per cent of all laparotomies ended fatally, and that, too, when only the simplest were considered operable. I recall a day in the city of Louisville, where I took my elementary medicine, when out of twelve ovariotomies performed, only one had survived the surgeon's uncleaned hands. Washington Irving in his delightful book, "The Knickerbockers," after making mention of the frequent trips of Gov. Peter Stuyvesant to Connecticut, on which occasions he was always accompanied by young Antony Van Corlear who acted both as a bodyguard and trumpeter to announce the approach of the Governor to the villages that lined the route, says that years after both were dead any interested traveler might have very readily traced the road they traveled by the children along the highway whose features suggested the paternity of the young trumpeter. So, too, were I sufficiently uncharitable, could I take you to some country graveyards and trace on weatherbeaten and mildewed marble the route traveled and even the dates thereof of more than one well-meaning physician as he unwittingly spread that "bete Noir" of all medical men, puerpural fever, from house to house, until an ignorant but

none the less outraged public sentiment, or possibly, his own conscience, drove him out of that special field of labor.

A story used to be told in the city of Paris of a visit of that great English surgeon, Sir Astley Cooper, on which occasion he was the guest of a surgeon of the Empire of no little renown himself. Naming a certain surgical operation the French man asked Sir Astley how many times he had done the operation, to which he replied: "Thirteen times with eleven recoveries." The French surgeon in response told Sir Astley that he had done the operation one hundred and sixty times and then pressed for an answer as to the number of recoveries answered that there had been none, "but oh Monsieur, they were all so very brilliante." I have seen an assistant stand by with watch in hand while a most distinguished New York surgeon did a thigh amputation "against time" before an admiring class of undergraduates, very much as Dan Patch paced his mile in 1.56, and I have lived to see amputations in general grow so very vulgar as that the least pretentious among us hesitated to confess to having been driven to such an alternative.

A military chaplain during our Civil War tells the following story, the truth of which he vouches for: An applicant for assignment to duty as an ambulance driver when asked by the examiner to outline the proper management and disposition of the wounded on the battlefield replied: If the soldier is shot here—pointing to the abdomen, knock him in the head with the butt of a musket—all others deliver as promptly as possible to the field hospital.

And, gentlemen, candor compels me to confess, in the language of Ulysses of old, that, at least to a degree, "I am a part of all I have met." I have turned back a few of the leaves of memory, not to awake in you a feeling of regret over our past errors, but to cheer you on to further and greater efforts, by showing you what time hath wrought—

"Time, the beautifier of the dead,
And only healer when the heart hath bled.
Time, the corrector where our judgments err,
The test of truth, love and sole philosopher."

And lastly, still taking advantage of a self-assumed privilege, and at the risk of becoming tedious, I want to congratulate you in that the seeker after the truths of medicine, if he delves deep enough, will inevitably find God. Indeed, I venture the assertion that he who has not done so has studied poorly and unprofitably. *"Ubi tres medici, duo athei"*—Where there are three physicians there are two atheists—once went unchallenged; but the very ignorance that I have depicted of past practices also blinded them from the Great First Cause. Forty years ago there was engraved over a professor's chair in the French school of Medicine in Paris this motto: "Je le pensay, et Dieu le guarit"—"I dressed his wound—God healed it." It is the language of the immortal Ambroise Pare. He is the same God whom Galen, the Greek physician, of two thousand years ago designated the "Divine Framer." In one of the most beautiful dramas of that great and accomplished Greek poet, Ion, written five hundred years before Christ, the story is told of a Greek boy who was to be sacrificed to appease the wrath of the Gods. Just before he was to give up his life he was approached by his sweetheart who asked him if he thought they would meet again. In answer he said: "I have asked that dreadful question of the hills that look eternal—of the clear streams that flow forever—of the stars among whose fields of azure my raised spirit has walked in glory. All have been dumb; but as I gaze on thy living face, I feel that there is something in the love that mantles through its beauty that cannot wholly perish. We shall meet again." Who has not found Him in the face of a pure woman. I have found Him in the field of a microscope in the still hours of the night when alone in an unknown city, among an unknown race. I have found Him in the healing of wounds, both of the flesh and of bones. I have found Him in the contracted ends of bleeding arteries, and in the fibrin of the blood that had been wasted. I have found Him in the line of demarcation between the living flesh and the dead. I have found Him in the sequestrated bone as slowly it is separated and driven from its resting place. I have found Him in the protecting wall that is thrown around a suppurative appendix.



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And lastly and above all else, I have found Him in the greatest of all cures, Death, as He lays His hand upon the troubled heart and stills it forever. But I am reminded that I am not here in the capacity of a historian or moralist, but rather to welcome you as most honored and acceptable guests. And in this I deserve your deepest commiseration; for realizing as I did, the inadequacy of all things that are common-place, I have not only wracked my own brain, but have sought the shades of the dead for a sentiment such as would be a fitting expression of the great pleasure it gives us to have you with us.

I greet you as worthy members of a pure and most honorable nobility. Not of that nobility whose shields bear the heraldic blazonry of monarchs whom they have served and perpetuated at the expense of human liberty, but of that whose armor has been bent and battered in an unselfish struggle for the relief of human suffering. For you, and such as you, I give this sentiment: There is no fortune too great for you; no happiness too pure for you; no life too long for you; and no heaven too true for you.

"A general welcome salute you all; this day we dedicate to fair content and you; none here, we hope, in all this noble company, has brought with him one care abroad; we would have all as merry as first-good company, good wine and good welcome can make good people."

* * *

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Coping with Medicine's New Climate

We hear a lot about new challenges facing medicine, and our leaders spend much of their time seeking means of meeting them. We can expedite our quest, and assure command of the changing patterns, through an objective understanding of the social and psychological climate facing medicine today, and a positive program to assume leadership in this climate.

Understanding the forces and trends in society that confront medicine is as important as proper diagnosis.

We are living in what has been called the Age of Rising Aspirations, but can more accurately be called the Age of Unreasonable Expectations. Marvelous changes have come so fast that many people, especially those who didn't experience the trials of adult life before 1946, now feel "miracles" can be had just by wanting them belligerently enough. This has destroyed the patience and discipline necessary to achieve any real accomplishment, and it has been abetted by public officials who—attuned to the public's psyche—promise easy attainment.

Our progress has hightened the great American illusion of perfectibility; many people now want instant transmutation of what *should* be into what *must* be.

Medicine, particularly, has problems created by its own success. Until our own generation, man lived with knowledge that death could strike at any time. The great strides in holding off disease and overcoming maladies have made everyone urgently want what medicine can offer. No subject is more capable of arousing emotions than life and health; now people demand, by coercion if necessary, that the best medical care be *given* to them. Of course, this is unreasonable because it takes time and effort to catch up with such surges of demand. But remember that throughout history in times of famine when no one could increase the supply of bread, people rioted in demanding bread.

Inevitably, when we bring about progress we create change, and change then challenges our successes because the patterns for our success no longer fit the bright new conditions we have created. The great problems of our age are how to create, live with, and *direct* and *master* change rather than have it overwhelm us and destroy the fundamentals that made our success possible.

Better education has also created problems: Almost everyone has "a little learning," which Alexander Pope said was a dangerous thing. Believing in their competence to judge matters that are beyond their capacity, people demand control over things in government and in private sectors that they do not really understand. In medicine, people now know just enough to be demanding and critical, and to expect too much.

Because of these changes and conditions, the medical profession is now faced with defending itself on other people's terms. In this situation, we must stoically assess what needs to be done and, with the well-known dedication of medical people, do these things.

This is where public relations comes in. At its best, public relations is a bridge toward change. It is a means to adjust to new attitudes that have been caused by change. It is a means of stimulating attitudes in order to create change. It deals with the problems of communication between changing groups that are rapidly being made different from each other.

Public relations gives each group the vital benefits of objectivity—of being able to see the whole of our society together, rather than from one intensified viewpoint. It provides judgment, creativity, and skills in accommodating groups to each other, based on wide and diverse experience. These forces, if they perform, are vital in a world that seems to tear itself apart, to set one group against another, and to destroy understanding.

Therefore, our analysis and program rec-

ommendations for medicine provide the bridge to our changing climate. The policy and plans approved by the AMA House of Delegates in San Francisco in June have this basis:

The AMA is dedicated to fostering optimum health care for the American people, and believes this can best be provided through the system of incentives and freedom for physicians.

Now, when all aspects of American life are under pressure, the health of the public depends on an orderly pattern of development in our health-care system.

Health care is a major aspect of the nation's overall climate of urgency in turning expectations of excellence into possession of the finest—in education, safety, health care, government services, and many other fields. Medicine no longer functions in the sober privacy of its scientific and ministering roles. Health and life are the most urgently desired expectations, and they therefore arouse the most emotion-laden concerns and scrutiny.

This situation calls for great statesmanship by the leadership of the profession, to avoid its being swept into destructive channels by the tidal wave of demand for its benefits. Doctors, trained to concentrate on facts and avoid the distortion of emotion and illusion, often find it difficult to realize that the emotional climate surrounding health and life is as important as are the facts in determining what the public and government feel about the medical profession. Because emotion is a potent part of the makeup of people's attitudes, facts alone cannot sway them.

Developing equilibrium between the complex realities of health care and the burgeoning expectations of the public and government involves these considerations:

1. Health care today is a multifaceted and intricately interlocked *system*. The ecology of any system is destroyed when undue pressure or demand is exerted at one point. Development of the system requires that development of all its segments be proportionate rather than, as in the case of Medicare and Medicaid, having segments of demand applied without due consideration for the pace of availability of manpower and resources.

2. The pressure of demand is a great tribute to medicine, for it comes from the people's awakening to how much the medical profession can do for them. This is the consequence of the profession's achievements, and meeting it is a part of medicine's responsibility in making its progress truly effective.

3. Medicine's startling rate of progress must continue, and its future progress is certain to create more change. The challenge is to master and direct change rather than to be overrun by it, or to have others take up the role of imposing accommodations on the medical system.

4. Informed projections indicate that the health team of 1975 may include 20 auxiliary persons for each physician. It is estimated that to meet reasonably the health care expectations of all the people would require 600,000 practicing physicians. Thus it would require more than 12,500,000 health care personnel, or one for every seven employed persons in the country. This is patently unrealistic, and it is unwise and dangerous to lead the public to believe that such expectations can be fulfilled. It is also dangerous to give way to pressures for optimum service for selected groups of the disadvantaged, thereby hindering proper care for the rest of the population. The emphasis must be on the most efficient use of available resources; orderly and balanced increases in these resources; and means to distribute services on an equitable, selective, priority basis.

5. Pressures on behalf of any single aspect of health care will lead to distortions and breakdowns in the system. This is true of pressures on behalf of any given pattern, including the traditional system. It is necessary to foster *balanced development* of health care in keeping with changes created by medical progress, needs of the public, make-up of the medical manpower pool and other factors. Otherwise, pressures will build up where the votes are greatest and lead to severe ruptures in the practice of medicine.

6. In a free society privileges must be matched by responsibilities. The medical

profession enjoys perhaps the greatest privileges of any segment of our society. It must assume comparable responsibilities. Today, a posture interpreted by the people as only protecting these privileges is likely to create an emotional backlash that will undermine the entire stature and acceptance of the profession. Discipline, standards of ethics, concern for the financial well-being of the patient and the nation must be as conspicuously fostered as the interests of physicians themselves.

Based on these circumstances, the following principles now guide the activities of the AMA and are recommended to all its constituent societies:

1. Organized medicine should concentrate on action to master the forces of change. Only the minimum attention necessary should be devoted to reacting to what others say and do, and thus avoid marching to their tune, abdicating leadership of medicine to outsiders, and dissipating medicine's energies and resources.

2. The AMA and all medicine should emphasize the need for a *balanced* approach to all developments in health care. It is vital to discourage working on any one part of the spectrum without being sure that all related areas are activated at an accommodating pace.

3. The AMA should develop and foster positive action programs addressed to meeting emerging needs as they appear. It should develop and promote recommendations on:

a. Allocation of manpower and resources to meet the needs of the majority of the public while gradually adding to ability to fill unmet needs.

b. Leadership in advancing all phases of a balanced health care system: (1) Manpower, both medical and supporting; (2) Facilities; (3) Increased efficiency in utilization of manpower and resources; (4) Absorption of new knowledge and techniques to raise standards constantly for all members of the profession; (5) Financing of health care on a sound basis from all sources as they can most equitably meet the needs; and (6) Responsibility in moderating costs in all aspects of health care.

4. The AMA and affiliated medical societies should emphasize the self-disciplinary responsibilities of the profession. If discipline of medicine is not to be preempted by the federal government, it must be up to date and conspicuous by the medical profession itself.

5. The AMA and affiliated medical societies should examine the operational ability of the profession to continue to afford leadership. Attention should be given to the flexibility and efficiency of the profession's organizational structure; membership for all elements of the profession; and attraction of new physicians.

6. The AMA and members of the profession should recognize that the prominence and complexity of health care in the United States now make it a subject of constant and pervasive interest. Many conditions outside of the medical profession now determine what the posture and communications of the profession must be, rather than the wishes and the timetables of medicine.

Accordingly, the foundations of public relations for the profession must be:

Practical: Each circumstance must be viewed in terms of what the consequences of any action or position will be. When the consequences of an action or statement will be constructive, it should be considered; when it cannot contribute to AMA's objectives, regardless of its other merits, it should be by-passed.

Positive: AMA should be the leader of action and thought on medicine; it should not be in the position of primarily reacting to the actions or statements of others.

Anticipatory: To be the master of change rather than its victim, it is essential to look ahead and sense what challenges may arise. We must provide for instant action and response whenever it is vital. Neither medicine nor communication can meet 20th century situations with 19th century systems. Today, communication requires the ability to function immediately; any other course makes the profession extremely vulnerable to the initiatives of those with opposing motives. In line with broad policies, the AMA

officers and staff must be able to make judgments and take actions promptly.

On the Initiative: AMA should devote its principal public relations energies to fostering balanced, informed, widespread coverage of medicine and health care, rather than to a multiplicity of matters initiated by others.

Augmented by Voices of Respected Laymen: Credibility is reduced when the medical profession appears to be isolated in its advocacy of its standards and policies. Information and advocacy from respected leaders in other fields, based on their knowledge and acceptance of the matters involved, will greatly enhance public acceptance. The understanding and support of such leaders of opinion should be sought actively.

Selective: AMA's public relations efforts cannot cover everything and do it well. Concentration should be on activating AMA's programs and priorities, with full knowledge that this will mean passing up many things that appear to need attention but are not part of this constructive plan. Members of the profession must be made aware that this selectivity is necessary.

The prominence and the complexity of medicine in the United States today result in many limitations of communication. Medicine is a constant subject of news and comment, much of which cannot be subject to a later response. Often replies cannot be carried by the broadcast medium or publication, or at best will be much less prominent than the original coverage. Quite often a responsible statement cannot be issued until the facts have been obtained, and these may be scattered about the country or involve a local situation or require a great deal of time.

The frequency and complexity of these matters have increasingly diverted the efforts of officers and staff of AMA toward reacting to what others do and say. This decreases the ability to work on constructive, ongoing activities that are vital to our future.

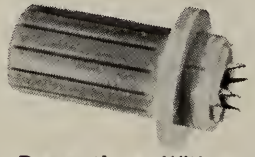
The AMA staff is developing, in written form, the best possible anticipatory statements regarding all foreseeable circumstances. By having such matters thought out and documented before a need arises, they will be able to reduce the instances of surprise, decrease the time required for response, and assure consistency in medicine's statements.

AMA will concentrate on building a positive posture by getting understanding for medicine's functions and *its* positions on various considerations, and by educating the press, broadcasters, and opinion leaders. This will help forestall much misguided criticism and build a favorable climate that will inoculate against susceptibility to unfair criticism.

The new climate presents new challenges. I believe important steps have been taken toward meeting them. With your help we can have confidence that medicine will, indeed, be master of the changing climate in years ahead.—Philip Lesly, Chicago. (*From Texas Medicine*, Dec. 1968.)

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Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

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VOLUME 62 MAY, 1969 NO. 5

An objective and comparative assessment of the relative merits of clinical auscultation and direct writing phonocardiography indicates a high yield from phonocardiography, especially in the timing of sounds. A by-product of the study was the demonstration of the direct writing phonocardiograph as a clinical training aid.

The Merits of Direct Writing Phonocardiography Compared with Clinical Auscultation*

BLAIR D. ERB, M.D., Jackson, Tenn.;
JOHN W. EVANS, M.D., DANIEL A. BRODY, M.D., Memphis, Tenn.

Data presented here collected in part during tenure of Dr. Erb's fellowship with the American Heart Association. Dr. Evans, deceased collected data in part during tenure of postdoctoral fellowship with the National Institutes of Health, U. S. Public Health Service.

In this era of increasing medical instrumentation the fascination of recording biologic phenomena tends to overshadow an objective appraisal of the value of the technique. The real value of graphic diagnostic aids is revealed in an analysis of the information gained by their use.

We undertook, therefore, a study of the aid provided by the phonocardiograph in the interpretation of cardiovascular sounds in 100 patients as compared with independent clinical auscultation.

The results of this study indicate that the phonocardiograph is not only of objective help in clinical cardiology, but the unique features of the direct writer make it especially desirable as a teaching device, particularly at the postgraduate level.

Methods and Materials

Careful and detailed clinical examination and auscultation was done by two and sometimes three of us on 100 patients on the wards of the City of Memphis Hospitals selected on a basis of interesting cardiovascular abnormalities. Our auscultatory findings were committed to paper by use of a check sheet describing the first sound, the second sound, other transients, and murmurs at each of the 5 major areas where the phonocardiograph was later to be applied. When we were satisfied that the auscultatory evaluation was exhausted, a phonocardiogram was recorded at each of the 5 areas using both stethoscopic and logarithmic bands of the direct writing instrument previously developed in this laboratory.[1,2]

When clinically indicated and technically feasible, apex cardiograms, carotid pulse tracings, and jugular phlebograms were recorded. Independent and later correlative examination of the phonocardiogram was carried out so we might compare the relative merits of each technique. Certainly we would not suggest that one technique in itself can be divorced from the others, since they have grown to be complementary procedures. We were interested, however, in delineating the areas in which phonocardiography contributed the most information.

Results

For purposes of this study, cardiovascular sounds were divided into two main categories, the murmurs (Table 1, Fig. 1) and the transients (Table 2). Table 1 (murmur analysis) and figure 1 (block figures) give a comparison between the auscultatory and phonocardiographic characteristics of the murmurs occurring in this group of subjects. Of a total of 143 murmurs which were heard in the 100 patients, 10 were not recorded successfully. On the other hand, 4

*From the Jackson Clinic, Jackson, Tennessee, and the Department of Clinical Physiology, University of Tennessee College of Medicine, Memphis, Tennessee.

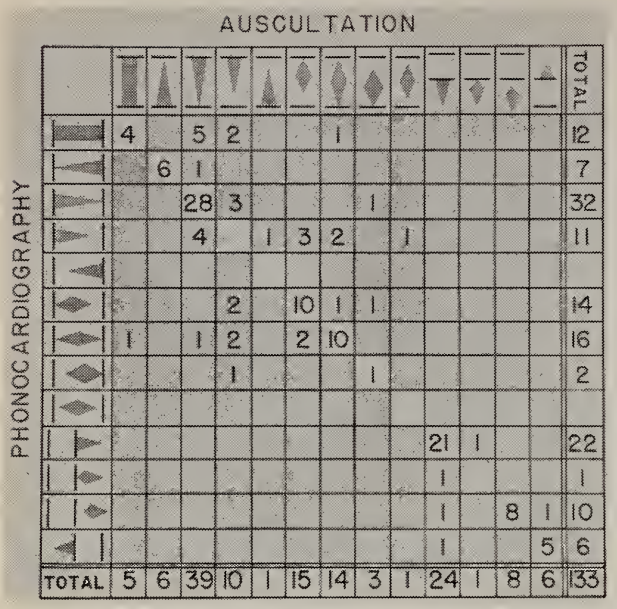


Fig. 1. Comparison of Auscultatory and Phonocardiographic Interpretation of Murmur Timing and Envelope. In this illustration the murmur envelope that was read from the phonocardiogram is compared with the murmur envelope described by auscultation. Agreement between the phonocardiographic and auscultatory interpretation is noted in the unshaded diagonal line. Disagreements are found in the shaded boxes and the type disagreement can be seen by reviewing the envelope shapes. The evaluation of 133 murmurs both heard clinically and demonstrated phonocardiographically revealed agreement in both the areas of timing and envelope in 93 murmurs. There was disagreement in either timing or envelope or both in 40 murmurs. Thirteen showed disagreement in both timing and envelope. Sixteen showed disagreement in the murmur envelope only and eleven showed disagreement in time only.

Table 1

Analysis of Murmurs

CLINICALLY AUSCULTED	143
PHONOCARDIOGRAPHICALLY RECORDED	137
AUSCULTED BUT NOT RECORDED	10
Soft and high pitched	3
Aortic insufficiency	2
Pulmonic insufficiency	1
Obscured by multiple murmurs	4
Faint mitral stenosis	1
Faint early systolic murmur	1
Pericardial friction rub	1
RECORDED BUT NOT AUSCULTED	4
Obscured by tachycardia	2
Faint mitral systolic murmur in presence of mitral stenosis and aortic insufficiency	1
Mitral stenosis (Auscultatory impression S_3-S_4	1

murmurs were recorded which were not heard clinically. The 133 murmurs demonstrated both by ear and by the graph serve as comparators of the two techniques in the study of murmur envelope and timing. The two groups of murmurs demonstrated by one technique but not by the other deserve separate comment in evaluating the differences between the two methods.

Table 2

Analysis of Disparities Between Auscultatory and Phonocardiographic Evaluation of Heart Sound Transients of 100 Subjects

Auscultatory Impression	*Phonocardiographic Characteristic*	*No. of Patients With Disparity*
S_1 not split	Split S_1	19
S_2 not split	Split S_2	6
S_1 and S_2 not split	S_1 and S_2 split	2
S_4 and Single S_1	S_3 and split S_1	1
S_3	S_4	6
Summation gallop and Single S_1	S_4 and Split S_1	1
S_4	Summation gallop	3
S_3	Summation gallop	2
Split S_1	S_4 and single S_1	2
Split S_1	Single S_1—systolic click	2
Presystolic rumble and Split S_1	S_3-S_4-S_1—systolic click	1
Split S_2 and OSMV	Single S_1 and OSMV	1
Split S_2	Single S_2 and OSMV	1
S_4	Mitral Diastolic Rumble	1
S_3	Mitral Diastolic Rumble and split S_1 and S_2	1
TOTAL		49

Unsatisfactorily Recorded Murmurs. Of the 10 murmurs heard but not recorded in this study, 3 were soft, high pitched basilar murmurs, 4 were lost because of a multiplicity of murmurs, 2 were faint murmurs adjacent to the first heart sound, and 1 was a friction rub.

Two of the 3 basilar murmurs were faint decrescendo murmurs of aortic insufficiency and 1 was a faint Graham-Steell murmur of relative pulmonic insufficiency. The adequate registration of soft, high-pitched basilar decrescendo murmurs is regarded (excluding the report of Wells, and associates[3]) as technically least satisfactory of all murmurs. There were, on the other hand, 22 patients in whom such high-pitched, soft diastolic murmurs were demonstrated graphically.

Multiple murmurs heard in 4 patients obscured definition of 1 murmur in each. Although vibratory activity was seen in the respective areas, separate murmurs could not be distinguished. In one of these patients the murmur of aortic stenosis was distinguishable clinically at the aortic area as well as a pansystolic murmur of mitral insufficiency at the apex. On the phonocar-

diogram there was overlapping of vibrations along the left sternal border and distinct differentiation could not be made on the record independently. This may in part be a reflection of previous experience that phonocardiography is a rather poor substitute for the auditory sensation of the quality of a sound.

Of the remaining 3 murmurs heard clinically but not seen on the phonocardiogram, 2 were faint murmurs and 1 was a friction rub. One of the faint murmurs was thought to be a mid-diastolic rumble of mitral stenosis in a very obese woman, but its presence was debatable and it may not have existed. Another of the murmurs was a faint, early apical systolic murmur. The friction rub was heard in both systole and in diastole, but the record failed to pick up the diastolic component. This failure may have been due to the transitory nature of the sound.

Clinically Undetected Murmurs. Four murmurs were detected with the phonocardiogram that were not suspected clinically. Of particular interest was the delineation of a mitral diastolic rumble with some presystolic accentuation in one patient thought to have only third and fourth heart sounds. The presystolic component of the murmur was mistakenly identified as a fourth sound.

Two early systolic murmurs were missed clinically in the presence of tachycardia. The difficulty in identifying murmurs in tachycardia is well known. The fourth murmur missed clinically was an early faint apical systolic murmur that was associated with the murmurs of aortic insufficiency and mitral stenosis.

Murmur Envelope and Timing. In the group of 133 murmurs demonstrated both by auscultation and by phonocardiography, there was significant improvement in murmur timing or envelope in 40. Although, according to Leatham,[4] murmur envelope and timing are complementary in defining the source of a murmur, we thought the two parameters technically were of sufficient interest to warrant separate treatment. The results of this study are shown in figure 1.

There was correction in the murmur envelope in 29 murmurs using the phonocardiograph. The significance of the envelope has been amplified by Leatham who classified systolic murmurs into two groups; midsystolic ejection murmurs caused by the forward flow of blood through the aortic or pulmonic valves, and pansystolic regurgitant murmurs resulting from incompetent atrioventricular valves or from left to right shunts as seen in ventricular septal defect (Fig. 2). The ejection murmur envelope

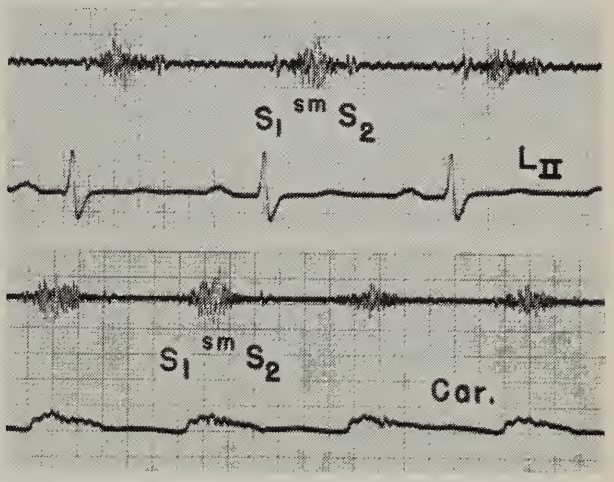


Fig. 2. Systolic murmurs (sm) according to Leatham's classification of pansystolic regurgitant murmurs and diamond shaped ejection murmurs. Above is the regurgitant murmur of mitral insufficiency. Below is the ejection murmur of aortic stenosis ending typically before the second sound.

assumes a diamond shaped character (crescendo-diminuendo) whereas the regurgitant murmur is more flat. This approach has been of distinct help in classifying murmurs, but the perfectly typical murmurs phonocardiographically were most often distinctly and easily recognized on clinical examination. The murmurs that were bothersome from a descriptive point of view were faint, early decrescendo murmurs usually ending before the second sound. The distinguishing features in these murmurs clinically usually were functions of transmission of the murmur and areas of maximal intensity. Although correlation of the intensity of sound in the various areas is poor with the calibration units available today, the direct writer is helpful in studying areas of transmission by nature of the ready availability of the graph for inspection (Fig. 3).

Phase timing was corrected in 24 murmurs. Most corrections in systolic timing

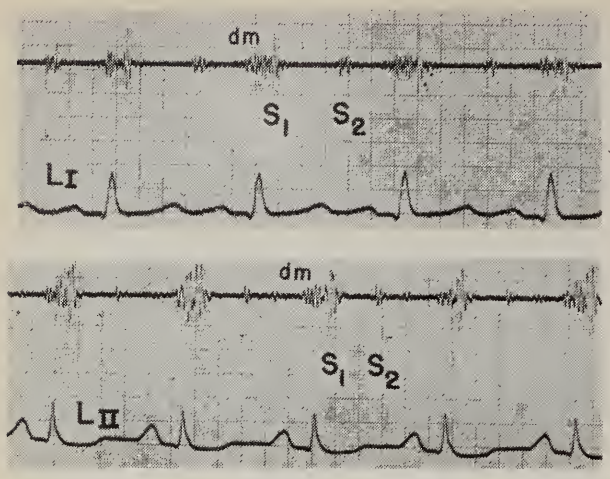


FIG. 3. The presystolic murmur of mitral stenosis (dm), above, ends in a sharp high pitched first sound (S^1). Below, the long crescendo rumbling of mitral stenosis is demonstrated, especially in mid-diastole ending in the sudden presystolic accentuation of the murmur. In this patient the rumbling murmur was mistaken for third and fourth heart sounds on auscultation.

were in determining the relationship between the end of the murmur and the second sound (16 murmurs), rather than in the association between the first sound and the beginning of the murmur (2 murmurs). This is of practical significance, since in the field of timing the terminal phase of a systolic murmur is of more importance in determining the character of the murmur using Leatham's classification of midsystolic ejection murmurs and pansystolic regurgitant murmurs.

Transients. As shown in table 2, the phonocardiograms of 49 of the 100 patients studied showed variants or abnormalities in their heart sound transients which were either not heard or not recognized on auscultation. The transients studied primarily consisted of the first heart sound, the second heart sound, the third and fourth heart sounds and their respectively produced diastolic gallops, systolic clicks, and the opening snap of the mitral valve.

The identification of these sounds has been shown to rest on their temporal relationship to the various pulse waves and the electrocardiogram. The localization of many of these sounds in discrete areas of the chest often makes their registration difficult. Exploration of the chest for optimal demonstration of these sounds is especially desirable with the direct writing phonocardiograph because the record is immediately available for inspection. This technique is a phonocardiographic analogue of "inching" and was of particular help in the demonstration of faint opening snaps of the mitral valve where identification depended upon their occurrence midway in the rapid filling wave of the apex cardiogram (Fig. 4).

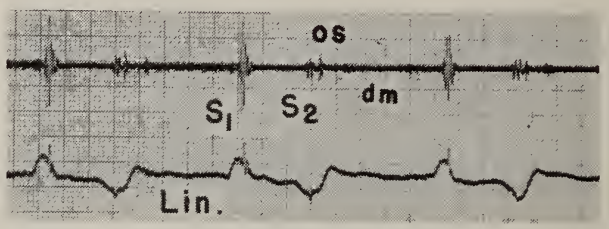


FIG. 4. The opening snap (os) of mitral stenosis is demonstrated here with the apex (linear) cardiogram. Notice the contour of the high pitched first heart sound.

Since the transients usually are abrupt sonic bursts occurring phasically in relation to the cardiac cycle, a time base record lends itself ideally to their study. This was of special significance in differentiating the third and fourth heart sounds from summation gallops and split first and second sounds. In 26 cases, however, when splitting of the first sound (19 cases) and second heart sound (7 cases) was clarified, the information gained was not a correction related to the phase of the cardiac cycle but represented a correction within a sound complex. It is not altogether unexpected to find graphic correction of the auditory impression of brief, temporally close transients in view of experimental work indicating the difficulty in auditory differentiation of transients occurring at intervals below 20 millieseconds.[5] Distinct criteria beyond which splitting is of clinical significance cannot be established since splitting of the second sound, for example, of as much as 0.1 second has been reliably reported in normal subjects.[6]

Splitting of the first heart sound must be differentiated from an atrial sound, an early systolic click, and the presystolic rumble of mitral stenosis. As a rule the vibrations centering around the first heart sound increased in frequency from left to right beginning with the lower pitched atrial sounds and mitral rumbles, through the first

sound to the highest pitched early systolic clicks. The fourth sound usually appears lower pitched and more widely separated from the first sound than the first component of a split first sound. Although these clinical criteria usually are adequate, the phonocardiogram demonstrated the fourth sound twice when it was mistakenly identified as the first component of a split first sound. The presystolic murmur of mitral stenosis was not mistaken for splitting of the first sound in this series.

Early systolic clicks (or ejection clicks) are clinically identified by their higher pitch and their location (Fig. 5). They are

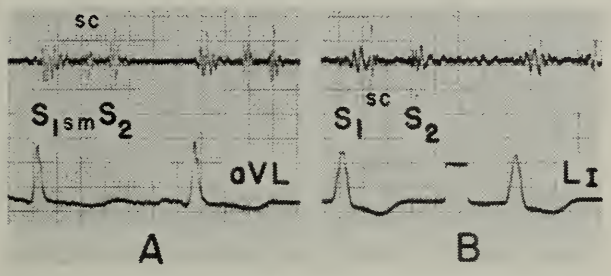


Fig. 5. Systolic clicks (sc) when occurring in midsystole are not given pathologic significance in themselves, although a faint systolic murmur (sm) was seen in the background of patient A with mild mitral insufficiency. The early systolic click seen in patient B was in the presence of aortic insufficiency.

loudest in the second and third interspaces normally and are referred to the apex only when they are unusually loud. The click is usually sharper than the second component of even a sharp first sound, and it may disappear to some extent during inspiration. These features tend to make the graphic demonstration of systolic clicks outstanding. In this series, systolic clicks were found in 3 instances where the first sound was thought to be split.

The diagnosis of splitting of the second sound does not offer as many problems in auscultation. The direct writer demonstrated splitting in 11 cases where it was not recognized clinically, and indicated that one instance in reality was an opening snap instead of a split second sound. The differential diagnosis of split second sounds rests between opening snaps of the mitral valve and late systolic clicks. Graphically the rapid filling wave of the apex (linear) cardiogram is the best means for definitive differentiation.

Since the low frequency characteristics of the third and fourth sound place them on the lower limit of the auditory threshold, the phonocardiogram is of particular value in their study. The concentration required to hear these sounds may impair the listener's clinical sense of timing. In this series, in 6 instances the fourth sound was erroneously identified as the third sound and in one instance the third sound was identified as a fourth sound. The experience of watching these low frequency sounds unfold on the tracing while we listened proved to be distinctly helpful in improving our clinical sense of timing.

In addition to identifying these diastolic transients, the recognition of mid-diastolic rumbles of mitral stenosis was made possible in 2 instances when the clinical impression was a third and fourth sound. Summation gallop was identified 5 times when it was not clinically suspected.

Discussion

This study concerning the auscultatory impression of cardiac sounds as related to independent phonocardiographic demonstration was undertaken to gain an objective evaluation of direct writing oscillographic phonocardiography. We were interested in attaching a value to the information gained and in finding in which areas phonocardiography may be most profitable to us. We do not deny that more sophisticated analysis of vibratory activity is fascinating and physically sound. Frequency analysis of spectral phonocardiography[7] and the octave band selection advocated by Luisada[8] have developed as independent graphic methods. From this study, however, it is apparent that it is in the parameter of timing of phonocardiographic events where most diagnostic criteria are clarified in the assessment of clinical problems. Since the oscillographic phonocardiograph produces primarily a time base record this could be predicted.

We believe these results confirm the value of direct writing phonocardiography as a useful clinical tool, and indicates the distinct aid in the timing of transients as

well as the study of murmur envelope. We believe the immediate availability of the completed record played a significant role in this high yield of information in the timing of cardiac events.

In addition as a by-product which was intangible, but nonetheless agreed upon by all those participating, it was not only a useful diagnostic tool but proved to be a very valuable training aid. Some gain along this line was anticipated, but the extent was not fully appreciated prior to this program.

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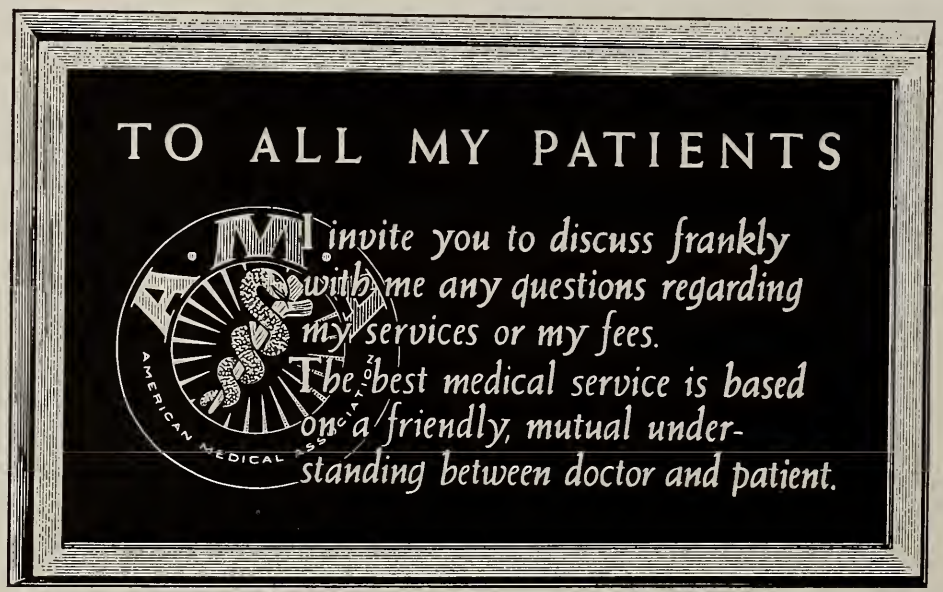
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This is the first publication of a photograph of three dimensional electron miscroscopy of a tumor cell. By use of an ultra-rapid method of deep freezing the structure of a viable tumor cell from the human prostate (biopsy) is shown in a magnification of 33,000 times its size.

A New Approach to the Examination and Identification of Human Prostate Tumor Cells Through Ultra-Rapid Deep Freeze Three-Dimensional Electron Microscopy

WILLIAM R. BISHOP, Ph.D.,* Memphis, Tenn.

The electron miscroscope has evolved into an extremely valuable research tool over the past decade for the investigation of the most minute structural details of human tumor cells. The vast potential of the modern high resolution electron microscope to photograph cell structures approaching the size of large molecules, magnified over a million times original size, has enabled the medical scientist to study in considerable depth, ultrastructural changes in cells of benign and malignant human tumors which are not possible to discern through the use of the conventional "light" or optical microscope.

The direct examination of "living" tumor cells with the electron microscope is not yet practical. Therefore, human tumor cells are generally killed or "fixed" with a chemical and their water content replaced with a plastic material through the infiltration and embedding of these cells in the plastic. These tumor cells embedded in plastic are then placed in an incubator in which the temperature is controlled in the vicinity of 140 degrees Fahrenheit until the plastic within and around the cells is properly polymerized and hardened into a solid block. The block is then sliced with a special cutting machine into a minute section of the cell as thin as 1/500,000 of a milimeter so the electrons may pass through the sliced portion of the cell to expose a photographic plate producing a highly magnified image of the ultrastructural details of the cell. The negative of the highly magnified image of the cell may be further enlarged in a standard photographic darkroom and printed out on photographic paper to provide the data of the tumor cell's ultrastructure for study by the medical scientist.

It is most desirable that the minute structures of the tumor cell be preserved in a state as natural and true as possible to the state of the living cell as it existed in the tissue of the human body prior to removal of the tissue biopsy. In the process of chemically killing the cell and embedding it in plastic, some structural changes within the cell and between the cells, including swelling and contraction, can result as a direct consequence of conventional methods for preparing the cells for electron microscopy. These changes in cell ultrastructure present critical problems in the interpretation of which structures are true and natural and which are artificial or artifactual.

Improvements in procedures of chemical fixation and plastic embedding over the years have reduced the problem of the formation of unnatural structural images but have not eliminated the problem. One of these involves the freeze drying of tumor specimens. This approach has not proven to be more reliable than other conventional methods because of the general employment of plastic embedment during the processing. Another approach, freeze substitution has been used to withdraw ice from the cells through replacement with organic solvents, e.g., alcohols or acetone; however, the cells are killed during the processing.

During the late 1950's, R. L. Steere[1] introduced a theory which provided for a relatively pure physical preparation of cells through rapid freezing to preserve the "true" image of the structure of the cell. However, this rapid freezing theory did not

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come into practical use until the early 1960's during which time Dr. Hans Moor and his colleagues[2] in Zurich, Switzerland, published a design for the first practical application of an ultra-rapid deep-freeze, cast or replica method to the preservation of cell structure in suspended animation for study in great detail and magnification with the electron microscope. Later, the Balzers High Vacuum Corporation of Liechtenstein, Europe, collaborated in the development of a practical instrument with which to process cells utilizing this freezing replication approach. However, until the late 1960's, much of the research employing this preparative method concentrated essentially upon the study of details of botanical cells. It has been only within the past two years that the application of this rapid freezing replication approach to the preservation of tissues of laboratory animals and cells has appeared in the professional journals. These recent publications concern nucleated erythrocytes,[3] fenestrated capillaries,[4] retina,[5] sciatic nerve,[6] heart muscle,[7] and liver.[8]

Tumor tissue received from surgical biopsy or autopsy may be treated immediately with an antifreeze agent containing glycerine at temperatures ranging from 32 to 40 degrees Fahrenheit. The antifreeze protects the tissue cells from the formation of ice crystals within the cells which have the potential to damage the minute detailed cellular structures. The antifreeze solution is followed by instant deep-freezing with liquid nitrogen to the ultra-low temperature of approximately 320 degrees below zero Fahrenheit. This specialized processing must be adapted precisely to the biochemistry of the particular type of tumor cell to be examined. If the rapid freezing process is done properly, the cells may be placed in a state of physical inactivity or "suspended animation." In this condition, there is essentially no ice crystallization within or around the cell and the water content of the cell is maintained in an amorphous state resulting in minimal structural and chemical alteration within and about the cell. It has been shown that intact cells preserved in this manner are "viable" to the extent that they are capable of continued growth and reproduction if properly thawed and placed in suitable growth media.[9]

The rapidly frozen block of cells is placed instantly upon a cold table maintained at temperatures below -220 degrees Fahrenheit. A vacuum is imposed around the frozen block in preparation for the subsequent splitting of the block with an exceedingly sharp metal blade. The blade is mounted in a cutting machine maintained within the vacuum at the ultra-low temperature of liquid nitrogen. The chipping of the frozen block of cells with this knife at very low temperatures, exposes in broad-face three-dimensional relief, the outside of the membrane constituting the limiting boundary of the cell containing all of the cellular contents. This cell boundary separates one cell from the boundary membrane of an adjacent cell in human tissue. The splitting process exposes in three-dimensional surface relief, the detailed structure of membranes found within the cell's content. Some of these membranes form an enveloping sac about the nuclear content. Other internal membranes form a multitude of sacs connected to the nuclear sac and to the inside of the boundary membrane of the cell. This system of interconnecting tubules serves to move nutrients and synthetic products to various areas within the internal environment of the cell as well as to the extracellular space outside of the boundary membrane. Three-dimensional bodies within the cell, e.g., "mitochondria" may be observed in their natural state in surface relief and cross fracture. The mitochondria produce the chemical energy ATP necessary for growth, reproduction, and survival of the cell.

However, in order to completely expose the minute structural details of the surfaces of the boundary membrane enveloping the cell and the multitude of membranes within the cell, or to uncover the detailed structure of the area containing minute connective and supporting filaments of collagen between the cells, it is necessary to remove an extremely thin layer of frozen water from the surface of the fractured or chipped cell to expose these surface details for the deposition of the carbon-metal cast which repre-

sents a "mirror image" facsimile or replica of these structures in precise detail.

The very thin film of carbon and platinum is deposited through vacuum atomization upon the exposed frozen relief of the cell structure producing the cast in three-dimension. The frozen tissue block of cells possessing the cast replica is then removed from the cold table and thawed. The adhering tissue cells are digested away from the facsimile which is further cleaned with special chemicals to remove all traces of organic debris. The cleaned replica is mounted directly upon a circular copper screen approximately ⅛ inch in diameter possessing as many as 400 uniform square holes. The mounted replica is placed in the vacuum column of the electron microscope and high voltage is employed to cause a beam of electrons to pass through the replica to expose a photographic plate and thereby produce an image of the cell structures in three-dimension.

The method of forming a replica of nonvital human structures has been applied successfully for many years to the study of tooth enamel and dentin, as well as to the exterior surfaces of killed cells and their various component parts separated and isolated through the use of high speed centrifugation. However, the new approach utilizes reversible freezing, constituting physical fixation which can present the advantage of maintaining an intact human cell in deep-frozen preservation for the formation of the facsimile replica revealing the precise detail of tumor cell structure. *This ultra-rapid freezing replica approach may be as near as the medical scientist will ever be to the examination of the minute structure of living cells at high resolution and magnification with the electron microscope.* Most particularly, the new approach provides a distinct advantage in the study of tumor cells of the human prostate maintained in close approximation to their natural state (Fig. 1).

The replica of ultra-rapidly frozen cell structures allows the medical scientist to examine with the electron microscope, the detailed porous nature of cell membranes, particularly those seen to penetrate the membrane enveloping the nuclear content, as well as the formation of membrane sacs along the broad surface of the boundary membrane in a three-dimensional view. The broad-face reliefs possessing pore-like openings and indentations of the boundary membrane to form membrane sacs are only observed in great detail through the employment of the ultra-rapid freeze replica method. It is believed that the pore structures in the nuclear envelope may provide a passageway for the movement of large molecules, e.g., nuclear proteins, between the interior of the nucleus and the area of the cell outside of the nuclear envelope, where proteins are known to be produced by the cell in systematic order along the outside of the vast array of interconnected membrane sacs constituting the endoplasmic reticulum. The synthesis of protein is believed to be under the precise direction and control of the nucleus, a problem of deep concern in human cancer. The minute grooves located along the broad surface relief of the exterior surface of the boundary membrane present evidence of the process referred to as "pinocytosis." This is the process by which the cell is able to capture nutrient molecules from outside of the boundary membrane and with the subsequent enclosure of these nutrients within membrane sacs lined with digestive enzymes and formed from the boundary membrane. These membrane sacs containing nutrient move deeper into the cell during which time the nutrients are digested and used further by the cell.

It is suggested that the utlization of the ultra-rapid freezing replica method for the study of human tumor cells may provide new information contributing to a more precise identification of various types of tumor cells in both benign and malignant categories, as well as the subclassification of malignant tumors. It may also be possible through the three-dimensional study of tumor cells in suspended animation, coupled with conventional methods for preparation of tumor cells for examination with the electron microscope, to discover cellular detail which may provide a means for earlier identification of tumor cells in human malignancy.

There are many other fascinating possibilities for the use of this new approach in



FIG. 1. This is the first published electron microscope photograph of an epithelial cell magnified 33,000 times original size from a biopsy of a benign tumor of human prostate gland prepared through ultra-rapid deep-freeze fracture replication.

The tumor cell is preserved in three-dimensions as a result of the vacuum deposition of carbon and platinum onto the deep frozen chipped surface of the tumor cell believed to be in a state of suspended animation. The angle of deposition, approximately 35°, produces the heavy areas of platinum and carbon on elevated prominences producing very dense profiles (a). The adjacent areas of light density represent rarefied profiles containing little or no deposit to produce the shadow effect (b). Those areas of gradual slope are darker on the elevated profile (c) becoming lighter on the incline of the slope (e). Areas of relatively uniform deposition on a

planar surface are of even density (f). The direction of the shadow is indicated by the arrow (d). All processing of the tumor tissue biopsy through ultra-rapid deep-freeze fracture replication was performed with the Bendix-Balzers High Vacuum Ultracryostat instrumentation.

The tumor epithelial cell (A) is seen to be separated from its neighboring cell (B) by the opposition of the boundaries of the two limiting membranes of the cells chipped across at (S'). The boundary membrane of epithelial cell(A) is seen in three-dimensional relief at (S) and the boundary membrane of the adjacent apposing cell is also seen in three-dimensional relief at (Sa).

Detailed ultrastructure of epithelial cell (A) is revealed in three-dimensional relief through the chipping away of the upper portion of the cell to expose the contours of the nuclear envelope (NE) possessing numerous pores (P) in broad relief and tangential three-dimension (P''). A portion of the nuclear envelope (NE) is chipped away at (x) to expose the underlying granular content of the nucleoplasm (Np) contained within the limiting membranes of the nuclear envelope. The nuclear pores are also seen in position (P') along the surface of the nucleoplasm. These pore sites are believed to represent areas of intimate association between the nuclear envelope and the granular nucleoplasm.

The cytoplasmic content (Cy) of the tumor epithelial cell (A) outside of the nuclear envelope possesses numerous membrane bound vesicles (V) of the endoplasmic reticulum (ER) constituting the internal system of interconnected membrane-bound sacs which serve as the intracellular transportation system associated with the limiting boundary membrane as well as the outer membrane enveloping the nucleus. Those vesicles identified as (V) in the electron micrograph represent areas of depression from which the membrane-bound bodies were removed during the chipping process from cell (A) and cell (B). A portion of the cytoplasm (y) between the nuclear envelope and the limiting boundary of the tumor epithelial cell (A) represents an area which was chipped out during the processing resulting in a portion of the cell profile with little definition.

This new approach to the preparation of tumor cells for electron microscopy provides the posibility of examining a replica or facsimile of ultrastructural cell design in broad face three-dimensional relief showing the nature and position of membrane pores. The nuclear pore pattern of tumor cells believed to be in a state of suspended animation can only be studied in broad relief through the application of this methodology.

medical research which may contribute to the knowledge concerning immunology and heart disease. The method can be applied to the study of antigen-antibody responses believed to occur at the external surface of the boundary membrane of blood cells. The particular advantage of viewing complete three-dimensional areas of cells in suspended animation allows the medical scientist to observe more clearly the intricate relationships between cells as well as the relationship between the outside surface of the cell boundary and the molecular structures within the extracellular spaces, particularly in the case of collagenous filaments contributing to the base support of epithelial cells. Furthermore, it would be interesting to apply the quick-freeze replica approach to study the interrelationships between the outside surfaces of contractile cells of the human heart muscle, particularly with regard to the intricate areas of interlaced contact between the cell membrane boundaries where it is believed the electrochemical impulse passes from cell to cell to excite the cardiac cell to contract.

Another area of intense interest centers about the examination of viruses and virus-like particles located in deep-frozen preserved cells of human and laboratory animal tissues in three-dimensions utilizing quick freeze replication of these cells for examination with the electron microscope. The application of the new method to this area of investigation is yet to come.

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The authors have shown increased sensitivity of adrenergic receptors in the region innervated by blocked ganglia as evidence of pharmacologic ganglionectomy.

A Demonstration of Law of Denervation After Repeated Stellate Ganglion Blocks*

TURAN OZDIL, M.D., CECIL D. ROWE, M.D., ROBERT HARRIS, M.D., and W. F. POWELL, M.D.,† Knoxville, Tennessee*

Claude Bernard, in 1880, expressed the opinion that "the excitability of all tissues seems to augment when they are separated from the nervous influence which dominates them." Hughlings Jackson, in 1884, observed that any circumstances resulting in loss of control of higher centers over the controlled area by this center results in increased activity in the latter.

Several publications supporting these observations appeared in the literature until 1939, when W. B. Cannon[1] described the Law of Denervation, saying, "When in a series of efferent neurons a unit is destroyed, an increased irritability to chemical agents develop in the isolated structure or structures, the effect being maximal in the part directly denervated." Many papers have been published since describing a variety of experiments supporting the Law.[2-4] Reasonable understanding was acquired with the advancing knowledge of the physiology of synaptic and neuro-effector transmission.[5] At present, the accepted explanation of the Law is that receptors are deprived of their transmitter substances in synapses or in neuro-effector junction, which increases the amount of receptors and receptive area, resulting in increased sensitivity.[6-8] All the membrane of the effector cell may become receptive to its transmitter, as has been demonstrated in denervated skeletal muscle.[6] In previous experiments, sensitivities were produced by surgical section of pre- and post-ganglionic fibers,[9,10] or by prolonged use of ganglionic and neuro-effector blockers,[10,12] using drugs which deplete transmitter stores,[13-15] or which stop the release of transmitter.[16] However, we did not find any information concerning the effect of prolonged regional and sympathetic ganglion nerve blocks by local anesthetic agents on the response of effector cell to transmitter substance.

With 2 patients, we had the opportunity to perform daily stellate ganglion blocks for 17 and 12 days, respectively, to produce pharmacologic stellate ganglionectomies for the purpose of treatment of vascular insufficiency of their upper extremities. At the end of each series of blocks, we set up a simple test to check the results, using the sensitization of adrenergic receptors in the area as an evidence of success. Procedure was explained to each patient and their consent was obtained before the tests.

Method. Unilateral stellate ganglion blocks were performed daily for approximately 2 weeks with tetracaine (Pontocaine) 20 mgm in 1% lidocaine (Xylocaine) with epinephrine 1:100,000, using a volume of 10 ml. The anterior (paratracheal) approach was employed. The day following the last injection, the patient was taken to the operating room. Blood pressure and pulse were monitored in the arm on the side opposite the block. A slow intravenous infusion of dextrose 5% in water was started via intracath in an antecubital vein on the side of the block. It was attempted to cannulate the submaxillary ducts, but, failing this, the parotid ducts were cannulated. Eight micrograms (4 mcg. base) per ml of norepinephrine solution was prepared for single injection. The intensity of room light was maintained low enough to minimize pupillary reaction to this source. One of us counted and recorded the drops of saliva from the cannula for 10 minutes before and 10 minutes after the injection of 1 ml of norepinephrine solution through the intravenous fluid line. Others observed the patient and recorded vital signs and photo-

*Read at the IX International BalKan Medical Union, September 5, 1968, Istanbul, Turkey.

†From the University of Tennessee, Memorial Research Center and Hospital Knoxville, Tennessee.

graphed the pupils before injection and after injection at the maximal response.

Case 1. A 45 year old man was admitted to the hospital with the complaint of acute onset of pain, cold, and cyanosis of the left hand and arm on the morning of admission, April 26, 1965. Two months before admission he had noticed numbness and coldness of his right arm, but at that time did not have pain or cyanosis. At approximately the same time he developed pain in the left elbow which had persisted intermittently. The patient awoke without symptoms on the morning of admission, but shortly thereafter began to have pain, coldness, and cyanosis of his left hand and arm, and came to the emergency room.

Examination revealed no radial or ulnar pulse on the left side but the left brachial pulse was palpable. Within an hour the ulnar and radial pulses became weakly palpable, but extreme coldness and cyanosis persisted.

Additional history revealed episodes of occasional pain in the left lower leg brought on by walking, but no pain at rest. He had no other known diseases except asthma. He related that cold aggravated the occasional pain in his left elbow.

The Anesthesia Department was called in consultation to perform stellate ganglion blocks to relieve what was considered to be the spasmodic component of arterial insufficiency. The patient had further diagnostic studies during the hospitalization.

Case 2. A 54 year old, obese, hypertensive woman was admitted to the hospital on Feb. 3, 1966 with a swollen and painful right hand and fingers. She had fallen on Nov. 24, 1965, 2½ months before admission, and had had a fracture of the distal right radius. The fracture was reduced and the extremity put in a cast in the Emergency Room without anesthesia. The arm remained in the cast until 4 weeks before admission; the pain and swelling began 2 weeks before admission.

The history otherwise was significant in that the patient was hypertensive and had been taking diuretics and serpasil for an extended period. At the time of admission, x-rays revealed a moderate degree of osteoporosis, especially of the carpal bones, and good healing of the fracture. The diagnosis was right sided reflex sympathetic dystrophy, secondary to the previous fracture. Consultation with the anesthesiologist was obtained and stellate ganglion blocks were begun.

Results

Both patients showed dramatic improvement after the first stellate block. In Case 1, the patient's ulnar and radial pulses became stronger, cyanosis and pain were relieved, and the hand became warmer. After 8 consecutive blocks, anisocoria (part of Horner's syndrome, which was prominently evident after each injection) persisted over the entire 24 hour interval between injections. On the 13th day the patient was awakened suddenly, and it was noticed that the pupil on the side of the block was dilated markedly, while the pupil on the opposite side remained moderately dilated. This condition persisted for 3 minutes and then the pupil on the side of the block became smaller than the other. After 17 daily blocks, the patient was studied as described above. The number of drops of saliva from each catheter before and after injection of 1 ml. of norepinephrine solution is shown in table 1, the size of the pupils in

Table 1

	Left Catheter				*Right Catheter*			
	Before Inj.		*After Inj.*		*Before Inj.*		*After Inj.*	
	Time	*Drops*	*Time*	*Drops*	*Time*	*Drops*	*Time*	*Drops*
	10:15	0	10:25	0	10:15	0	10:25	0
	:16	0	:26	2	:16	0	:26	1
	:17	1	:27	1	:17	0	:27	0
	:18	0	:28	2	:18	0	:28	1
	:19	0	:29	1	:19	1	:29	0
	:20	0	:30	1	:20	0	:30	0
	:21	1	:31	1	:21	0	:31	0
	:22	0	:32	0	:22	0	:32	1
	:23	1	:33	0	:23	1	:33	0
	:24	0	:34	0	:24	0	:34	0
Total	10 min.	3	10 min.	8	10 min.	2	10 min.	3

(Case 1.) Comparison of the number of drops of saliva from cannulated parotid ducts before and after the intraveneous injection of norepinephrine.

(Fig. 1A and B). As seen in table 1, the number of drops from the nonsensitized right side practically did not change following injection, whereas the amount from the sensitized side almost tripled after injection. The pupil of the sensitized left side was smaller than the right pupil before injection (Fig. 1A). It became larger about 1 minute after injection and remained larger for approximately 3 minutes (Fig. 1B). Pupillary reaction was not as strong

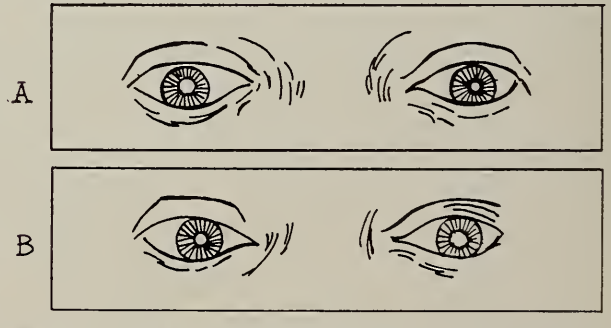


Fig. 1. (Case 1.) Demonstration of paradoxical pupillary dilatation before (A) and after (B) intravenous injection of norepinephrine.

as was seen on the 13th day as described above. We could not record one other finding since color film was not readily available, but which is significant, this was the extreme vasoconstriction on the left side (sensitized) resulting in a waxy mask-like color of the skin, while the right side appeared quite normal. This persisted for approximately 10 minutes.

The second patient received 12 consecutive blocks. Her pain was relieved promptly, and the swelling gradually subsided. It was rather difficult to observe anisocoria in this patient after stellate blocks because her pupils stayed constricted on both sides. Very careful observation did show a slight difference in size. At the time of the final study, the amount of salivation from both sides increased after the injection, a few drops more on the side of the block (Table 2). We observed, but could

Table 2

	Left Catheter				*Right Catheter*			
	Before Inj.		*After Inj.*		*Before Inj.*		*After Inj.*	
	Time	*Drops*	*Time*	*Drops*	*Time*	*Drops*	*Time*	*Drops*
	11:34	1	11:44	0	11:34	1	11:44	1
	:35	1	:45	1	:35	2	:45	2
	:36	1	:46	2	:36	1	:46	2
	:37	1	:47	2	:37	1	:47	2
	:38	1	:48	1	:38	1	:48	1
	:39	1	:49	1	:39	0	:49	1
	:40	0	:50	1	:40	0	:50	1
	:41	0	:51	1	:41	1	:51	1
	:42	1	:52	0	:42	1	:52	1
	:43	0	:53	1	:43	0	:53	0
Total	10 min.	7	10 min.	10	10 min.	8	10 min.	12

(Case 2.) Comparison of the number of drops of saliva from cannulated parotid ducts before and after intravenous injection of norepinephrine.

not photograph, pupillary response because of the very small size of the pupils. However, upon close observation there was slightly more dilatation of the pupil on the sensitized side, which began in approximately one minute and persisted less than 30 seconds (Figs. 2A and B). We were unable safely to repeat the injection because the patient had an extreme cardiovascular response to the injection, demonstrating very high blood pressure, palpitation, and anxiety, which lasted for quite some time.

Discussion

The above studies indicate that repeated stellate ganglion blocks with local anesthetics sensitize adrenergic receptors in the region innervated by the blocked ganglion. Pupillary reaction, observed on the first patient during the 13th day of visit and again observed and photographed during the final test, after the injection of noradrenaline, was observed by Budge in 1855. The phenomenon later became known as "paradoxical pupillary dilatation."[17] Evidence of increased sensitivity being less in Case 2 is probably due to sensitization of all adrenergic receptors in this patient by the long-term consumption of serpasil prior to and during the time of the study.[14,15] In fact, extreme cardiovascular response to a single small dose of norepinephrine may be the result of this sensitization.

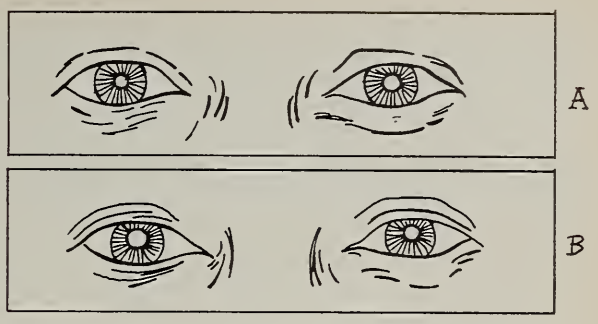


Fig. 2. (Case 2.) Demonstration of paradoxical pupillary dilatation before (A) and after (B) intravenous injection of norepinephrine.

Since stellate ganglion blocks involve both pre- and postganglionic fibers, their effect would be the same as denervation. Decentralization may also be produced by giving continuous or repeated epidural or spinal blocks.

The mechanism by which repeated nerve blocks by local anesthetics produces sensitization of effector cell to its transmitter is either the result of decreased release of transmitter from nerve endings, as a result of reduction of arriving impulses or reduction of transmitter stores due to the degeneration of neurons as a result of prolonged blocks.

In conclusion, if permanent procedures, as surgical sympathectomy, worsens vascular insufficiency in the presence of high circulating transmitter due to increased irreversible sensitivity of adrenergic receptors, procedures producing the same kind of effect, but reversible, such as sympathetic ganglion block by local anesthetic drugs, may be superior in relieving vascular spasm or the spasmodic component of vascular insufficiency. With the addition of repeated pre- and postganglionic block by local anesthetic drugs to the armamentarium to pro-

duce sensitization of effector cells to their transmitter, and since the Law of Denervation may be applicable for afferent as well as efferent neurons,[18,19] we propose a classification and terminology as illustrated in figure 3 to summarize the Law of Denervation.

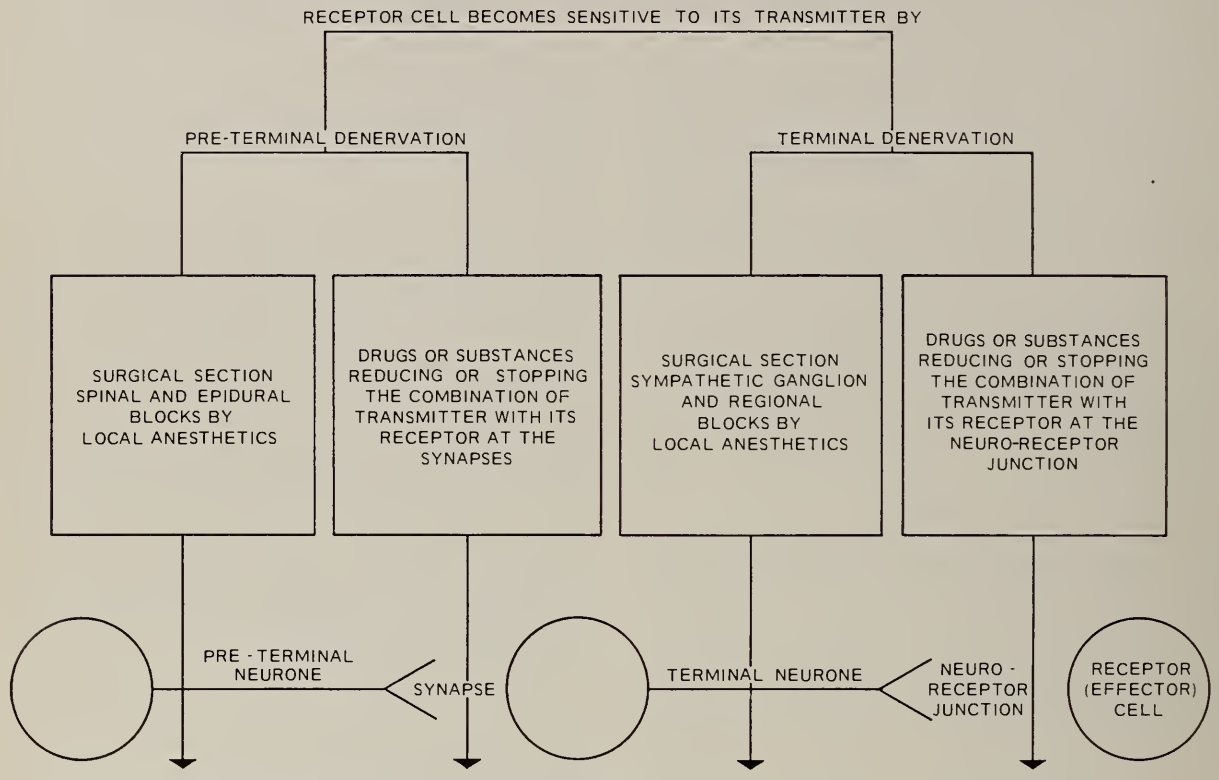


Fig. 3. Proposed classification and terminology of the sensitization of receptor cells.

Summary

Two patients received daily stellate ganglion blocks for 12 and 17 days, after which a simple clinical test was performed to demonstrate the supersensitivity of adrenergic receptors to Qnorepinephrine in the region innervated by the blocked ganglia, as an evidence of pharmacologic ganglionectomy.

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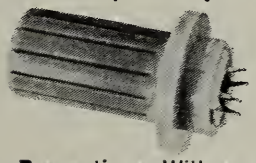
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Gas Gangrene Cholecystitis

DR. HERMAN J. KAPLAN: The case for today's discussion will be presented by Dr. Charles Smith.

DR. CHARLES SMITH: This is a 75 year old white woman who developed mild epigastric pain one day prior to admission. Twenty-four hours later she was hospitalized because of fever, vomiting, and worsening of the pain. Her general health had been good, and the past; family and personal histories were unremarkable.

At the time of entry her T was 102.8°F and BP 130/80. She was oriented, cooperative, in no distress, and not icteric. There was mild tenderness to palpation in the right upper quadrant of her abdomen. No abdominal organs or masses were felt and the general examination was otherwise within normal limits for her age. The WBC count was 9,500 with an unremarkable differential; the Hgb. was 13.8 gm./100 ml.

Twelve hours following admission she appeared worse and was definitely icteric, with a serum bilirubin of 6.3 mg./100 ml. The serum amylase was 929 Somogyi units and the alkaline phosphatase 3.9 Bodansky units. On attempted cholecystography there was neither visualization of the gall bladder nor air in its area.

Twenty hours after admission a gram-positive bacillus was cultured from the blood; it was later identified as *Clostridium perfrigens*. Two hours after this information was obtained the patient had a cholecystectomy. Prior to this, she had been given penicillin intravenously and streptomycin intramuscularly. The gall bladder was found to contain 9 small stones, and evidence of subacute and chronic cholecystitis. On smears of the gall bladder mucosa, gram-positive rods were seen.

After cholecystectomy, penicillin, chloramphenicol, and gas gangrene antitoxin were administered intravenously. In the initial postoperative period she appeared alert, but had a low grade fever and a rise in the total serum bilirubin to 31 mg./100 ml. with a direct fraction of 18.5 mg. Marked oliguria (50 ml. of urine/24 hours) became sustained. The BUN rose to 82 mg./100 ml. on the 3rd postoperative day, and peritoneal dialysis was employed. At this point she was confused and restless. On the 6th postoperative day she showed marked improvement in her general well-being, azotemia, and jaundice. It was felt that the infection was controlled, and isolation was discontinued. However, on the 9th hospital day she became worse, developed signs of pleural effusion, and suddenly died.

*From the Department of Medicine, St. Thomas Hospital, Nashville, Tennessee.

DR. KAPLAN: I would like to emphasize several pertinent points. The initial picture of acute cholecystitis was relatively benign. No air was present in the gall bladder area. Her course worsened rapidly. She became markedly icteric, oliguric, and azotemic. The resected gall bladder showed only subacute and chronic infection.

Dr. Hugh Boyle will present the autopsy findings.

DR. HUGH BOYLE: At autopsy recent injury to the myocardium was identified. Pleural effusion was present bilaterally. The operative site was clean and normal; there was no evidence of infection. In the liver there were multiple small abscesses containing gram-positive bacilli. Blood culture at autopsy showed no growth.

DR. KAPLAN: Gas gangrene infections are seen in several distinct clinical situations. They are most commonly encountered as wound infections. Their significance in uterine infections following criminal abortion is well established. Although uncommon, they are occasionally seen in operative wounds following any kind of abdominal surgery. Rarely, as in this patient, they are seen complicating cholecystitis preoperatively. The organisms of gas gangrene are natural inhabitants of the gastrointestinal tract, and it is fortunate that such horrible complications are not more common. These organisms need an anaerobic environment; it is only after infection sets in that conditions for their growth may become appropriate, setting the stage for the complications of their toxicity. In culturing the bile during ordinary cholecystectomies, two major findings are noted. In about two-thirds of the cases, no growth is present. In one-third a variety of organisms are recovered. In only few instances are they Clostridia; the incidence varies from 2% to 18 per cent.

What about the clinical recognition of this problem? In cases where the infection is present early in the postoperative course, events are very dramatic. The patient is very restless, develops high fever, becomes very toxic, and suddenly dies. Early clues in the postoperative period may be an infected wound, surrounding brownish discoloration, and crepitus. However, if one

waits for crepitus to be obvious, it is already too late. It may be detected much earlier with the use of a stethoscope. The clue in this patient was the growth of *Clostridium perfrigens* on blood culture. We obtained a blood culture not because we suspected gas gangrene infection, but because things just did not look right. Much is said about emphysematous cholecystitis —the presence of air in the gall bladder or in its wall. But also here the findings are not conclusive. As this patient demonstrated the presence of gas gangrene infection in the gall bladder need not be associated with air in the gall bladder. In most cases, emphysematous cholecystitis is not really caused by Clostridia organisms. The mortality rate in gas gangrene cholecystitis approaches 50 per cent. Non-gas gangrene emphysematous cholecystitis has a mortality rate of less than 20 per cent.

The early clues to preoperative gas gangrene cholecystitis are: (1) a clinical picture of acute cholecystitis; (2) rapid worsening of the patient's course; (3) rapid development of marked jaundice; (4) radiographic evidence of air in the gall bladder or its wall; (5) growth of Clostridia organisms on blood culture.

What else, besides cholecystectomy, could have been done for this patient? For a discussion of these questions and other pertinent points we turn to Dr. Anderson Spickard, who saw the patient in consultation, and to Dr. Benjamin Fisher, who did the cholecystectomy.

DR. ANDERSON SPICKARD: The diagnosis of gas gangrene cholecystitis was promptly suspected by Dr. Kaplan and Dr. Fisher. When the blood culture was reported to be positive for a gram-positive rod, no more than two hours elapsed from the report until the completion of the cholecystectomy. Gram-positive rods were demonstrated in the wall of the gall bladder. Although we had an impression that the primary infection had been controlled by cholecystectomy, microabscesses were present in the liver and bacterial stains confirmed the impression that these were residual Clostridial organisms. This patient was given 20 million units of penicillin every 24 hours. She also received chloamphenicol postoperatively. It was discovered that this patient was probably allergic to horse serum. Despite this history, she was given the antitoxin in gradual increments and showed no obvious reaction to this desensitization.

As Dr. Kaplan pointed out, the literature contains reports of Clostridial infection in the postoperative period in a variety of abdominal surgical operations, including elective cholecystectomy. Preoperative cholecystitis due to *Clostridium welchii* infections is a very uncommon disorder. The diagnosis is suspected in a person with symptoms of cholecystitis who has gas demonstrated in the region of the gall bladder or the liver. Clostridia, anaerobic streptococci, and the coliform bacilli are cultured frequently from the gall bladder bile of such patients. This condition is referred to as acute emphysematous cholecystitis. Dr. Kenneth Jacobs of this city reported 2 instances of this entity in 1956 and reviewed the literature on emphysematous cholecystitis.[1] He reported that of 33 patients. 86% recovered. Of the 5 fatal cases, 3 died of overwhelming sepsis, one from a pulmonary embolus, and one from a cardiovascular accident. It was his conclusion that removal of the gall bladder and appropriate antibiotic and gas gangrene antitoxin treatment were adequate for recovery in most cases. In 45% of the cases, Clostridium and nonspecific gram-positive sporulating rods were cultured from the surgical specimen. In a matter of 12 hours, this patient had developed a serious gas gangrene infection similar to the course of patients who have gas gangrene in the uterine cavity and massive wounds. She had severe hemolysis, and the accumulated toxins produced profound alterations in her renal function.

Clostridia organisms are ubiquitous in nature. They can be recovered from the floor, clothing and furniture. They are resident inhabitants of the gastrointestinal tract. I suspect the majority of persons in this room would have positive stool cultures for *Clostridium welchii* if appropriate anaerobic cultures were taken. They have been recovered from liver biopsy specimens cultured anaerobically. In one study 19% of

gall bladder bile and gall bladder walls have been positive for *C. welchii.* For some reason, this lady developed the appropriate anaerobic conditions in the area of her gall bladder which allowed the multiplication of the organisms and elaboration of the toxins. I have always been curious about the human body's ability to harbor so many of nature's microorganisms without apparent injury to the host. When the anaerobic conditions are right, these normal saprophytes turn on the host and can destroy it. This condition is responsible for the lethal toxin production in tetanus infections and botulinum toxin production in contaminated foods.

The relatively few organisms in a puncture wound contaminated with *Clostridium tetani* produce enough toxin to paralyze the breathing, swallowing, and chewing apparatus of the host. Spasms of all muscles in the body in tetanus is a prolonged agony for the patient and physician alike.

You may recall the local outbreak of botulism in which smoked whitefish from Lake Michigan were contaminated with *Clostridium botulinum,* Type E. Anaerobic conditions were created when the smoked fish were sealed in cellophane bags before shipment. Botulinum toxins produce paralysis of the respiratory muscles, pupillary dilatation, and paralytic ileus 24 to 48 hours after ingestion of contaminated food.

Toxins of *Clostridium perfringens* are equally destructive. A pure filtrate of *C. perfringens,* Type A, produces a number of toxins which attack normal tissues. For example, the alpha toxin is an enzyme, a lecithinase which catalyzes the hydrolysis of phosphate bonds from the phosphatides, lecithin and sphingomyelin. Another toxin is hemolytic, necrotizing and cardiotoxic. Still another clostridial toxin is a proteolytic enzyme specifically attacking collagen.

The treatment of choice for clostridial infections is high doses of penicillin. Since these organisms are frequently accompanied by others, particularly the coliform bacilli, kanamycin in a dose of 0.5 gram every 12 hours or chloramphenicol 3 to 4 grams intravenously daily is indicated. Immediate cholecystectomy is necessary in any patient with gas or an air-fluid level demonstrated in the gall bladder area. I would use a polyvalent gas gangrene antitoxin before culture reports are available. It requires 24 to 48 hours for some of them to grow and the decision to use antitoxin has to be made before that time. I think the data for or against gas gangrene antitoxin is certainly not as good as with the specific antitoxin in botulism or the antitoxin in tetanus, but from the experience in those other two clostridial infections, I am in favor of using it when gas gangrene infection is suspected.

DR. BENJAMIN FISHER: Clostridia are obligate anaerobes requiring a low oxidation reaction potential in order to proliferate. They become harmless when exposed to high oxygen saturation which explains the rationale for the use of the various peroxidases in the past and hyperbaric oxygen at present. In the preantibiotic era, gas gangrene infections were treated with debridement. Such treatment was not very effective. Antibiotics brought about some improvement, but really not too much. I would say the mortality rate is a good 50% on the average, and probably much higher if one eliminates the cases where Clostridia are mere contaminants. Only 15% of the cases of pneumocholecystitis are secondary to Clostridia organisms. Consequently, when a low mortality rate is reported for pneumocholecystitis, it is obvious that the relatively benign course is due to the fact that 85% of these have other organisms that are the pathogens. Most positive wound cultures are meaningless, since most of the strains of *C. perfringes* obtained in such cultures generally are nonsporulating and of low virulence. When one examines the cases of cholecystitis caused by gas gangrene, one notes that the outcome is almost invariably fatal. Judd[2] reported only 5 instances of gas gangrene cholecystitis in 16,000 cholecystectomies. His mortality rate was 100 per cent. Death usually takes place within 50 hours, so the course of the disease is extremely rapid. Only one of his patients survived 40 days.

Very few of us here treated patients with pneumonia prior to the antibiotic era, and remember what a horrible and fatal disease it was. The same is true today in the case of Clostridia infections and hyperbaric oxy-

gen. To be specific, I remember one patient whom I was called to see in consultation. The patient had had a retropubic prostatectomy, complicated postoperatively by gas gangrene involving both legs and lower abdomen. The legs were enormous with bullae throughout. The treatment considered was extensive fasciotomy versus bilateral amputation. Fortunately for this patient, this was in New York City and I arranged for him to be transferred to Mount Sinai Hospital to a hyperbaric oxygen chamber. This deathly ill patient was *well* within 24 hours. I mean well, cured!

Like everyone else here, I have struggled with patients with gas gangrene, lost some, saved some, always with extensive effort. And here in one day with hardly any work, a doomed patient was well! How much more dramatic can you get? Unfortunately for our patient here, she appeared to be improving and her infection seemed under control. Consequently, we did not make the effort to fly her to a medical center with a hyperbaric oxygen chamber. Of course, her critical state, renal shut-down and negative blood cultures all conspired to lead us to the course of treatment we took. Her death appeared to be of cardiac origin, whether due to toxemia or other causes.

Hyperbaric oxygen has changed dramatically the course of treatment of gas gangrene infections, but it must still be combined with all our other modalities of treatment—antibiotics, debridement, etc.

PHYSICIAN: What is the dose of polyvalent antitoxin used?

DR. FISHER: Usually 45,000 units are given immediately and 20,000 units every 4 hours while the infection is going on and toxin production is apparently being continued.

PHYSICIAN: Did this patient get repeated doses of antitoxin every 4 or 6 hours?

DR. SPICKARD: She was given the desensitizing doses over a period of an hour. After the cholecystectomy we believed the infection was controlled by removal of the gall bladder. She was not given subsequent doses.

PHYSICIAN: How would you judge how long to keep up antitoxin? What would be your guidelines?

DR. SPICKARD: I went by our experience with tetanus. I believe toxin production ceases when the focus is removed. When amputation is completed in a patient who has tetanus infection in the finger, no additional antitoxin is necessary. In this patient the removal of the gall bladder was the definitive surgical procedure and for the same reason we elected not to give any more antitoxin. There is no way that I know of to measure the production of toxin. In botulism we believe the toxin is absorbed from the large bowel over a period of hours or days and we give repeated doses of antitoxin. In infections with *Clostridium perfringens* or tetanus we give one dose of antitoxin; if continued infection is suspected, the antitoxin is given every 6 hours.

In this patient the assumption that the infection was eradicated with the cholecystectomy was incorrect, since abscesses were present in the liver.

PHYSICIAN: Is a hyperbaric chamber available nearby?

DR. FISHER: Duke is the only place in the immediate vicinity. It was suggested that some airports might have a decompression chamber, but they don't. I think it would be no problem to send patients to either Duke or New York City. Any diver's station that may be available can work just as well. In any event the objective is to expose the patient to a tremendous concentration of oxygen, perhaps 20 times higher than under normal circumstances.

DR. KAPLAN: Thank you, gentlemen, for a fine discussion and I'm sorry that time does not allow more questions.

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From the Executive Director
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TMA MEDICAL DIGEST

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TMA MEMBERSHIP REPORT . . . As of January 1, 1969, the Tennessee Medical Association was made up of 3037 regular dues paying members, 228 veteran members (over age 70), 34 members in a postgraduate education training status and 20 in military service, for a total of 3319 members. This represents a net gain of 79 over the previous year, exclusive of deaths or transfers . . . Forty-eight deaths occurred among the membership in the past year. TMA also has 2855 active dues paying members of the American Medical Association and 286 dues exempt members for a total AMA membership of 3141.

* * * * *

AMA-ERF MONEY DISTRIBUTED . . . Tennessee's three medical schools received $39,230.48 from AMA-ERF . . . These were contributions made in 1968 to the American Medical Association's Education and Research Foundation . . . The total contributions in 1968 nationally amounted to $1,120,345.88. In Tennessee, physicians gave $10,052.00 to the national total while the Woman's Auxiliary to the Tennessee Medical Association raised $22,124.15. The total amount contributed from Tennessee was $32,176.15. Only seven states in the nation surpassed this amount. The TMA Woman's Auxiliary did a wonderful job for AMA-ERF and their total contribution was exceeded only by two states, California and Ohio . . . The three medical schools in Tennessee received a total of $39,230.48 from the AMA-ERF program. The checks were awarded to the deans of the respective medical schools in Tennessee at the first session of the House of Delegates at Gatlinburg on April 10 . . . Of the three medical schools, $18,625.30 was awarded to the University of Tennessee College of Medicine; $14,529.38 to Vanderbilt University School of Medicine and $6,075.80 to Meharry Medical College. . . Of the total monies contributed to AMA-ERF, allocations went to the following programs: funds for medical schools; Medical Education Loan Guarantee Program; Categorical Research Grants; Fellowship Program in Medical Journalism; Institute for Biomedical Research; and the Committee for Research on Tobacco and Health.

* * * * *

PHYSICIAN REPRESENTATION ON HOSPITAL GOVERNING BOARDS . . . In the previous two years, the House of Delegates has urged through appropriate resolutions, that physicians seek representation on hospital governing boards in Tennessee . . . Again in 1969, a resolution was submitted by the Committee on Hospitals to the House of Delegates to urge physician participation in hospital policy determination . . . Physician in Tennessee should take appropriate steps through their local medical societies and hospital staffs to accomplish this end.

* * * * *

CONTINUING MEDICAL EDUCATION PROGRAM IN TENNESSEE . . . An important resolution to finalize policy of TMA's Committee on Continuing Education, was submitted to the House of Delegates at its annual session April 10-12. The Committee presented its recommendation stating that

continuing self-education is imperative in the promulgation of good medical practice and further, believing that motivation is basic to self-education, recommended that each TMA member become active in continuing education and self-examination . . . The Continuing Education Committee will have as its function to act as a liaison and catalyst to the medical staffs of community hospitals and with the cooperation of the Regional Medical Program, to assist them in a promotion of their own continuing education program.

* * * * *

TMA SUCCESSFUL IN LEGAL DECISION . . . The Tennessee Medical Association has participated in a legal action with the Henry County Medical Society pertaining to hospital staff privileges of osteopaths . . . The judge of the Court of Appeals found in his opinion that hospital trustees and officials are vested with a large measure of discretion in selection of members of the medical staff; that the trustees must rely upon professional or expert assistance in judging the qualifications of applicants to the medical staff; and that the trustees have a legal right to accept only MD's as members of the medical staff to the exclusion of other practitioners who are not Medical Doctors.

* * * * *

BLUE CROSS-BLUE SHIELD OF TENNESSEE . . . The Tennessee Hospital Service Association has changed its corporate name to Blue Cross-Blue Shield of Tennessee. The new name became effective on February 10. The corporation has announced that Blue Cross-Blue Shield will more accurately describe the operation and identify more closely with the national Blue Cross-Blue Shield movement.

* * * * *

NEW AMA PAMPHLETS DISCUSS DRUG USE . . . Because of the rising incidence of drug abuse in the United States, especially among young people, the American Medical Association has published five related pamphlets, "Amphetamines", "Barbiturates", "Marihuana", "LSD", and "Glue Sniffing". Written originally for the 1968 Community Health Week program on drug abuse, the one-page pamphlets answer many of the questions frequently asked about this growing problem. In addition to describing the effects of these dangerous substances on the body, each pamphlet stresses the hazards of experimentation, the psychological effects on the users and the legal controls . . . Review copies are available from the AMA's Department of Health Education. Quantity copies are available from Order Handling at 15 cents each; 50-99 copies, 14 cents each; 100-499 copies, 12 cents each; 500-999 copies, 10 cents each and 1,000 or more copies, 8 cents each.

* * * * *

FAMILY MEDICINE IN AS PRIMARY SPECIALTY . . . A new specialty of Family Medicine was officially recognized by organized medicine recently when the Advisory Board for Medical Specialties and the Council on Medical Education of the American Medical Association approved a specialty board in family practice. The advisory board actually approved a revised application for specialty status submitted by the American Academy of General Practice and the Section on General Practice of the AMA. The new American Board of Family Practice is empowered by the decision to conduct examinations and to grant specialty certification to family physicians who meet its qualifications and pass the examination. This certificate will be recognized by the AMA and other regulative bodies in medicine, just as other specialty groups are recognized.

Public Service

Communications Legislation

Hadley Williams, Public Service Director

HOUSE OF DELEGATES ELECTS PHYSICIAN-OF-THE YEAR . . . The TMA House of Delegates elected Dr. Carroll H. Long of Johnson City as Physician-of-the-Year during the Annual Meeting held last month in Gatlinburg. Dr. Long, a general surgeon, was presented a plaque by the Speaker of the House of Delegates, Dr. Tom E. Nesbitt, during the President's Banquet. Dr. Long is well known for his church and civic work in Johnson City. He is a past-president of the Johnson City Kiwanis Club and has been elected to the City Board of Education, City Board of Commissions and in 1963 was elected Mayor of Johnson City. A member of the First United Methodist Church in Johnson City, Dr. Long was recently honored for his outstanding service to church-related health and welfare ministries throughout the Holston Conference by being named to the United Methodist Hall of Fame in Philanthropy. Dr. Long has served as a missionary in Alaska, India and Nepal and currently heads a fund raising drive for needed hospital construction in Yadgiri, India.

* * * * *

DR. CLARK HONORED BY BOARD OF TRUSTEES . . . Dr. C. Robert Clark of Chattanooga was honored by the TMA Board of Trustees at the April meeting in Gatlinburg with the Association's Distinguished Service Award. The award was given in recognition of Dr. Clark's outstanding contributions to the advancement of medical science and to the work of the Association. Dr. Clark was the fourth recipient of the award which was established by the Board in 1964. An orthopedic surgeon, Dr. Clark serves as Chairman of the Emergency Medical Care Committee on both the state and local level and has earned recognition for his tireless work in seeking to improve emergency medical care personnel and facilities. He has been honored by many organizations for his contributions to his community including the City of Chattanooga, Chamber of Commerce, American Red Cross and Civil Defense Agencies. Dr. Clark currently serves on the Governor's Emergency Medical Services Committee.

* * * * *

LEGISLATIVE COMMITTEE VISITS WASHINGTON . . . The Legislative and Public Policy Committee of TMA visited Washington, D.C. May 6th and conferred with members of the Tennessee Congressional delegation. A luncheon was hosted by TMA in the House Speaker's Dining Room in the Capitol Building. The one-day visit has been conducted annually by TMA for the past nine years and affords members of the Committee the opportunity to discuss first-hand matters of interest and concern to medicine with elected Congressmen and Senators. Physician representatives from each Congres-

sional District made the trip. Dr. O. Morse Kochtitzky is Chairman of the Committee.

* * * * *

HEALTH PROJECT CONTEST WINNERS ANNOUNCED . . . Boones Creek High School was judged winner of the 16th annual Health Project Contest sponsored by TMA and the Woman's Auxiliary. A check in the amount of $500 was presented to two student representatives of the school during the TMA Annual Meeting in Gatlinburg. Topic of the winning entry was "Care for the Elderly" and was compiled by students of the school's 12th Grade Health Class. The sponsor of the class and the students were guests of TMA and received their award from TMA Treasurer, Dr. Robert Chalfant of Nashville, during the President's Banquet. Second place and $300 was awarded to Manchester's Westwood Junior High School for their entry "Teenagers and Drugs". Chattanooga Brainerd and Nashville North tied for third place honors and each received $175 awards. "Better Mental Health Adjustment for Teenagers" was Brainerd's entry while North High submitted the project, "Mental Health — Everybody's Business". The Science Club and Chemistry classes of Brainerd High also was a winner and received $100 for their entry "Air Pollution". The purpose of the contest is to help teach the youth of Tennessee the value of good health through a practical group-project activity.

* * * * *

IMPACT BOARD ELECTS DR. NELSON CHAIRMAN . . . Dr. Armistead Nelson of Nashville was elected chairman of Board of Directors of Independent Medicine's Political Action Committee - Tennessee last month. He succeeds Dr. Richard Sexton of Knoxville who was not eligible for re-election. New members of the Board include Drs. Robert Demos of Chattanooga, Harold Neuenschwander of Knoxville, Edward H. Welles of Dresden and Mrs. Richard Sexton representing the Woman's Auxiliary. The annual AMPAC workshop, to be held in Washington May 16 is expected to be attended by most of the ten-member IMPACT Board.

* * * * *

MEDICAL ASSISTANTS CONDUCT ANNUAL MEETING . . . The Medical Assistant Society of Tennessee conducted their 13th annual meeting in Chattanooga May 3-4 at the Read House. Mrs. Hope Hurst of Jackson was installed as President of the organization.

* * * * *

AMA ASSIGNS NEW FIELD REPRESENTATIVE . . . Mr. Leon Swatzell has been named Field Representative for Tennessee succeeding Mr. Art Seeds, who has accepted a position with the Illinois State Medical Association. Mr. Swatzell will operate from a field office of the AMA located at 4990 Poplar Avenue, Memphis. In addition to Tennessee, Mr. Swatzell will serve the states of Arkansas, Mississippi, Alabama and Louisiana. A native of Missouri, Mr. Swatzell has served as AMA Field Representative for Michigan, Minnesota and Wisconsin in the past and assumes his new assignment from a staff position with the AMA's Health Manpower Council.

* * * * *

GENERAL ASSEMBLY ADJOURNS UNTIL JANUARY, 1970 . . . The Tennessee General Assembly adjourned May 9th after completing 45 days of their allotted 90 legislative day session. The remaining half will be utilized beginning January 13, 1970. A complete summary of the Assembly's actions on health related legislation will be published in the TMA Transmitter and mailed to all members.

President's Page



FRANCIS H. COLE

The annual meeting of Tennessee Medical Association in Gatlinburg has concluded after a good attendance, an excellent scientific program covering a wide range of subjects, and many hours of gruelling work for the House of Delegates, the Reference Committees, the Board of Trustees, and the Nominating Committee. Policy making rests with the House of Delegates, and it is extremely important for practicing physicians throughout Tennessee to concern themselves with the workings of the House, and to become active in local society affairs, so as to take their proper turns as Delegates to the Tennessee Medical Association. Decisions are being made that will seriously effect every aspect of medical practice, research and education, and no influence can be exerted on these decisions by physicians who take no part in the affairs of the Association.

Certainly the leadership in the Association changes slowly, and the faces at the head table become awfully familiar, but the details of the Constitution provide for orderly rotation and retirement of officers so that new people do come into positions of leadership while enough continuity is provided to preserve familiarity with policies and with previous decisions of the Association. To assume responsibility in the Association would be almost impossible without the period of apprenticeship provided for incoming officers.

During the next 12 months we will have complex negotiations with governmental agencies, federal, state, and local on the provisions of health care services to various categories of recipients—the Medicare group, the Medicaid people, the Railroad retired, and veterans. All of these will require certain records to be kept, and forms to be completed. Government fiscal interest can easily be translated into quality control with utilization surveillance. The medical profession, through conscientious ethical behavior of individual physicians must keep up its self-discipline so that the pressure for third party supervision of our professional affairs will not be intruded into the doctor-patient relationship.

Sincerely,

Francis H. Cole, M.D.

President

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OF THE
TENNESSEE MEDICAL ASSOCIATION

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MAY, 1969

EDITORIAL

DR. THOMAS R. RAY, PAST PRESIDENT

Dr. Ray died on February 12, at the age of 88 years. Thus, we must pay our last respects to one of the Past Presidents of the Tennessee Medical Association.

An editorial in the August 1931 number of the *Journal of the Tennessee State Medical Association* tells us something of Dr. Ray's younger days. He was born on a farm in Bedford County, where he lived for the first 18 years of his life. He attended country school during the short fall and winter sessions, worked on the farm and, it is said, hunted rabbits with "marvelous proficiency." At age 18 he embarked on a brief career as a country school teacher, an experience not uncommon to many doctors of his generation.

Dr. Ray began the study of medicine at the University of Chattanooga, but after the first year transferred to the University of Louisville Medical School which granted him the M.D. degree in 1907. Immediately thereafter he entered practice at Normandy in Bedford County. In 1911, Dr. Ray moved to Shelbyville where he gave attention especially to the practice of surgery which continued to his retirement in 1955. Dr. Ray's stature in the medical profession was recognized by the presidency of the Bedford County Medical Society, of the Tri-County Society and of the Middle Tennessee Medical Association. In 1931 he was elected Vice President for Middle Tennessee of the TMA. Several months later he assumed the presidency upon the death of the elected President, Dr. Robert Caldwell.

Dr. Ray, throughout his active life as a doctor, had the welfare of the citizenry at heart. He started the movement for establishing the first hospital in Bedford County. He made his influence felt in the area of public health for the people of the state as one of the leaders in establishing the Tennessee Public Health Council on which he served for 28 years. Too he was a member of the State Board of Health. These activities and interests for the good of the community led Dr. Ray to enter politics. In 1954 he was elected state senator representing Bedford, Moore and Coffee Counties, a post he occupied for four years. In the State Senate he served on its Committee of Agriculture and lent his support especially to improvements in the public school system and the state's roads and highways. As a member of the advisory committee on Hill-Burton hospitals, Dr. Ray could and did offer much from his professional background and political acumen to the successful implementation of this contribution to the community's well-being.

Upon the death of Dr. Ray, the Tennessee Medical Association recalls with pride not only an officer who served well in this duty, but one who contributed professionally to the well-being of countless numbers of patients and who, in public office, directed his attention to the betterment of health and welfare of the citizens of Tennessee.

R. H. K.

IN MEMORIAM

Hudson, Granville, W., Nashville. Died March 31, 1969, Age 55. Graduate of University of Arkansas School of Medicine, 1939. Member of Nashville Academy of Medicine.

Cates, Arthur J., Jr., Millington. Died March 20, 1969, Age 54. Graduate of University of Tennessee College of Medicine, 1938. Member of Memphis and Shelby County Medical Society.

Marshall, Ben H., Fayetteville. Died March 4, 1969, Age 63. Graduate of Vanderbilt University School of Medicine, 1935. Member of Lincoln County Medical Society.

Mumpower, Daniel L., Nashville. Died April 14, 1969, Age 87. Graduate of Vanderbilt University School of Medicine, 1912. Member of Nashville Academy of Medicine.

Boone, George D., Jr., Tucson, Arizona. Died February 12, 1969, Age 67. Graduate of Vanderbilt University School of Medicine, 1926. Former member of Henry County Medical Society.

PROGRAMS AND NEWS OF MEDICAL SOCIETIES



New Members

The Journal takes the opportunity to welcome these new Tennessee Medical Association members.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY
Wallace Doyle Grissom, M.D., Chattanooga

DICKSON COUNTY MEDICAL SOCIETY
Jerry Qualls, M.D., Dickson

HENRY COUNTY MEDICAL SOCIETY
Robert D. Adams, M.D., Paris

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY
F. F. Fountain, Jr., M.D., Memphis
Jerre M. Freeman, M.D., Memphis
Richard H. Garrett, M.D., Memphis
William C. Grant, M.D., Memphis
Larry H. Johnson, M.D., Memphis
Gilbert Katz, M.D., Memphis
David Meyer, M.D., Memphis
Edward N. Morgan, M.D., Arlington
Jack C. Sanford, Jr., M.D., Memphis

MONTGOMERY COUNTY MEDICAL SOCIETY
W. C. Greer, M.D., Clarksville
John F. Patterson, M.D., Dover

NASHVILLE ACADEMY OF MEDICINE
Mehmet H. Nazli, M.D., Madison
Charlie R. Smith, M.D., Nashville
Grover R. Smith, M.D., Nashville

NORTHWEST TENNESSEE ACADEMY OF MEDICINE
A. Peter Inclan, M.D., Dyersburg

PUTNAM COUNTY MEDICAL SOCIETY
John D. Crabtree, M.D., Cookeville

RUTHERFORD COUNTY MEDICAL SOCIETY
Marvin E. Deck, M.D., Murfreesboro
Joseph Knight, M.D., Murfreesboro
J. W. Tenpenny, M.D., Murfreesboro

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY
Everette L. Haas, M.D., Bristol, Virginia
A. J. Mosrie, M.D., Kingsport

WEST TENNESSEE CONSOLIDATED MEDICAL ASSEMBLY
James H. Crenshaw, M.D., Humboldt
James A. Price, Jr., M.D., Jackson

Knoxville Academy of Medicine

The program for the meeting of the Academy on April 8th was sponsored by the Second Congressional District IMPACT Committee. Guest speaker was Mr. Joe Miller, Director of the new AMA Division of Public Affairs.

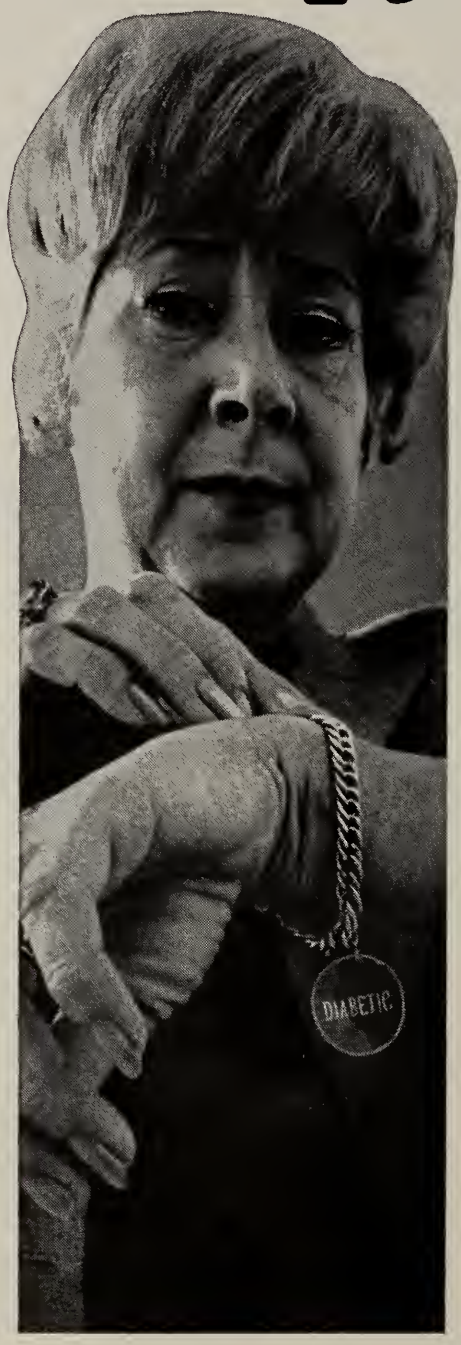
Mr. Miller, former Director of AMPAC which is now a part of the new Public Affairs Division, discussed the activities of the Division and gave an evaluation of the impact of AMPAC and the other PAC organizations in the 1968 elections.

Nashville Academy of Medicine Davidson County Medical Society

Mr. Clayton Scroggins, Cincinnati, professional business consultant, advised members of the Nashville Academy of Medicine on how to conduct their practices more efficiently, economically, and effectively at the meeting of the Academy on May 13th. The meeting, held in the auditorium of Baptist Hospital, was preceded with a dinner and business session.

a broad-spectrum antibiotic for the diabetic:

threat or therapy?



Disordered metabolism makes her prone to bacterial infection —and to moniliasis.

When she needs tetracycline, she may also need protection against the threat of fungal overgrowth. And Tetrex-F can provide both.

Each capsule contains 250 mg. of tetracycline phosphate complex to control sensitive bacterial pathogens...and nystatin, 250,000 units, as a precautionary measure against troublesome vaginitis, proctitis or other monilial infections. However, superinfection with other, nonsusceptible organisms may occur.

Tetrex-F®
(tetracycline phosphate complex-nystatin)

PRESCRIBING INFORMATION: Tet-F. 5 —2/23/67. For complete information consult Official Package Circular.
Indications: Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections.
Contraindications: The drug is contraindicated in patients hypersensitive to its components.
Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).
Precautions: Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months.
Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur.
Usual Adult Dosage: 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.
Supplied: Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin.

For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles. **A.H.F.S. Category 8:12**

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

Roane-Anderson County Medical Society

A dinner meeting of the Roane-Anderson County Medical Society was held March 25th in the cafeteria of the Oak Ridge Hospital. The scientific program entitled, "Diagnostic Pointers in Ocular Surgical Disease", was presented by Dr. Jay Reid Roberts, Ophthalmologist of Knoxville.

Memphis-Shelby County Medical Society

The Society met in regular session in the auditorium of the Institute of Pathology, University of Tennessee, on April 1. The scientific program was sponsored by the American Cancer Society. Guest speaker, Karl Z. Morgan, Ph.D., Director of Health Physics Division, Oak Ridge National Laboratory, discussed "Maximizing the Ratio of Benefits to Risks from Medical-Dental Exposure to X-Rays". Dr. Morgan's presentation was followed with a panel discussion.

NATIONAL NEWS

The Month In Washington

(From Washington Office, AMA)

The Department of Health, Education and Welfare issued proposed regulations setting standards for rubella vaccine, making it possible for it to be ready for distribution in limited quantities by about June 1. The standards cover production methods, safety, purity and potency. They were developed by the Division of Biologics Standards, a unit of the National Institutes of Health. Final regulations could be published as early as May 3. Indications were that two manufacturers would have a vaccine ready for initial distribution soon after the regulations had been made final.

"This means that we are one step closer to the prevention of a disease that has caused an untold number of tragic births," HEW Secretary Robert H. Finch said when the proposed regulations were issued. "We are moving ahead to combat German measles in the quickest manner consistent with public safety."

The regulations apply to vaccines containing a live virus strain known as HPV-77, which is grown in either duck embryo or dog kidney cell culture systems. Experimental vaccines produced in accordance with the standards have undergone extensive community testing in the United States and abroad. Two manufacturers, Merck, Sharpe & Dohme and Philips Roxane Laboratories have produced vaccines based on this strain.

"We hope that more than one vaccine will be available," Dr. Robert Q. Marston, NIH Director, said. "Regulations covering the use of other virus strains and culture media for rubella vaccine production will be formulated on the basis of extensive tests now going on."

Smith, Kline & French Laboratories has tested widely an experimental vaccine containing the Cendehill strain of rubella virus.

An HEW announcement said: "German measles is a threat to susceptible pregnant women at any time, but the threat increases significantly during epidemic years. One of the most tragic and disastrous epidemics to hit the United States in modern times was the German measles epidemic of 1964-65. This resulted in about 50,000 abnormal pregnancies. About 20,000 infants were born with such crippling defects as mental retardation, heart disease, blindness and deafness. The remaining 30,000 pregnancies terminated in miscarriage or stillbirth.

★

The Food and Drug Administration has taken the first step to halt the marketing of 78 antibiotic combination products. The ultimate action was recommended by the National Academy of Sciences-National Research Council, which is evaluating the effectiveness of about 3,600 new drugs marketed from 1938 to 1962.

Generally, the 78 products were found ineffective as fixed combinations for claims made in their labeling. The FDA emphasized that this does not necessarily mean that either the antibiotics or other active ingredients of the products are ineffective when used alone.

"But the use of two or more active ingredients in the treatment of a patient who can be cured by one is irrational therapy," said

Herbert L. Ley, Jr., M.D., Commissioner of Food and Drugs. "It exposes the patient to an unnecessary risk. Antibiotics should be used like a rifle rather than a shotgun."

The majority of the 78 products are antibiotic-sulfa combinations in tablet, capsule, or liquid form. Also included are 16 penicillin-streptomycin combinations that are given by injection. Other antibiotics used in the preparations include erythromycin, neomycin, tetracycline, chlortetracycline, nystatin, osytetracycline, oleoandomycin, and triacetyloleandomycin. In addition, some of the preparations contain analgesics, vitamins or other ingredients.

The antibiotics combinations are the products of 21 different manufacturers, including Chas. Pfizer & Co.; Eli Lilly & Co.; Lederle Laboratories division of American Cyanamid Co.; Bristol Laboratories Inc., a division of Bristol-Myers Co.; Merck & Co.; E. R. Squibb & Sons Inc., a subsidiary of Squibb Beech-Nut Inc.; Upjohn Co.; Wyeth Laboratories Inc., a subsidiary of American Home Products Corp.; Abbott Laboratories; and Hoffman-La Roche Inc. In an earlier proposal last December, the FDA similarly moved against products marketed by Squibb, Lederle and Upjohn.

Many of the affected products have been promoted widely and found wide acceptance in the medical profession. Several of the manufacturers promptly said they would contest the FDA ruling and others were expected to oppose it also. The manufacturers were given 30 days to submit any new data on efficacy of the products. There were 12 products in the first groups, announced last December. A decision still was pending on whether manufacturers of those products should have additional time to submit evidence of efficacy.

The FDA can halt the marketing of antibiotic-containing preparations by deleting them from regulations listing the antibiotics and insulin, unlike other drugs, must be certified on a batch-by-batch basis before they can be marketed.

★

Two spokesmen for the medical profession asserted before a Senate subcommittee that the policies and scientific journals of their organizations are not biased in favor of the prescription drug industry because of the drug advertising revenue.

Sen. Gaylord Nelson (D., Wis.), chairman of the Senate Monopoly Subcommittee which is making a broad study of the ethical drug industry, accused the medical journals of following the pharmaceutical industry's line to get advertising dollars.

Both Dr. Edward R. Annis, a member of the AMA Board of Trustees, and Dr. Maynard I. Shapiro, president of the AAGP, emphatically denied the charge.

"The American Medical Association's programs and policies have never been, are not now, and will never be shaped by any dependence on the drug industry," Dr. Annis said. "And to assure that there is no conflict of interest, the AMA has consistently separated the editorial management, advertising acceptance, and business management of each of its scientific publications. . . . "We believe that no publication surpasses our own standards for acceptable advertising."

Nelson sharply criticized the *Journal of the American Medical Association* as to the ads it carried on chlormycetin after the drug had been judged to be extremely dangerous. Annis acknowledged that "one Madison Avenue effort . . . slipped through the net" of AMA advertising standards. But he pointed out the various warnings on the drug carried in the editorial content of JAMA and other AMA publications.

"Advertising is screened by a group of physicians, all of whom we consider qualified to perform their task," Dr. Shapiro said. "We don't list the names of these physicians in our magazines because we believe they prefer a degree of anonymity. All are medical school faculty members and all, in our opinion, are well qualified to screen pharmaceutical advertising." Dr. Shapiro also said that at least two drug firms had canceled ads in the AAGP publications after they had carried editorials adverse to the companies.

★

The Nixon Administration recommended to Congress that the Hill-Burton hospital construction and improvement program be changed to permit block allocation of grant funds to states.

Since enactment of the first Hill-Burton legislation in 1946, federal grants for it have been earmarked for specific purposes.

In a statement to the House Health Subcommittee, Robert H. Finch, secretary of Health, Education and Welfare, said the nation's health needs had changed since the Hill-Burton program was started. Today's needs, he said, are twofold: Modernization or replacement of existing and obsolete acute care facilities in the hospitals and expansion of other kinds of medical facilities to reduce the pressures on hospitals and help curb skyrocketing medical costs.

He recommended a $150 million annual grant authorization for construction, replacement or modernization of the most critical types of health facilities. "Additionally, we recommend the removal of the existing Hill-Burton categories to provide a better balance of health care facilities in the community by assisting those kinds of facilities which have traditionally been neglected or in short supply," he said.

Expansion of neighborhood health center programs also was recommended. The HEW statement said it was required to meet the health needs of the poor.

H. Phillip Hampton, M.D., Tampa, Fla., testifying for the AMA, said the AMA continues its long-standing support of the Hill-Burton program but belives that "the major need that exists today is for the improvement and effective use of existing facilities."

"Priority for modernization and the upgrading of existing facilities will lessen the strain on the available supply of health personnel needed to provide services obtained in hospitals and related facilities," he said.

The AMA supported a provision in one of the two Hill-Burton bills before the subcommittee that would permit states to transfer funds from one allocation to another, providing "further elasticity to the transfer of funds from construction to modernization."

The AMA opposed as unnecessary the establishment of Hill-Burton priorities for construction or modernization of outpatient facilities or facilities to provide comprehensive health care. Such needs should be met through other laws already enacted, the AMA said. Dr. Hampton explained:

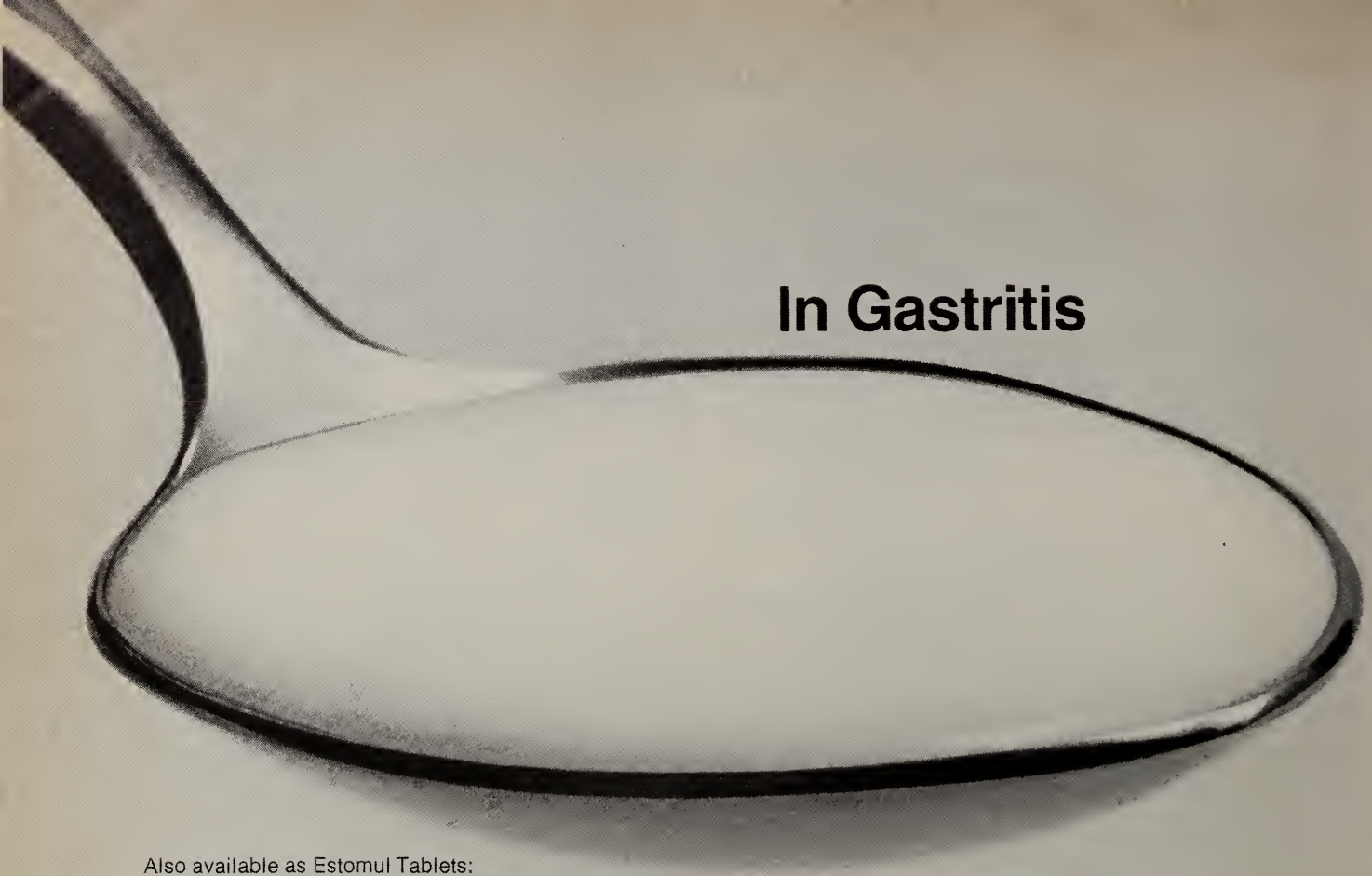
"We hope to make this point clear: We understand the part played by hospital outpatient departments in providing a place for necessary services to a community, and to the role played in teaching and training. But we believe that any need for outpatient facilities, separate and apart from the hospital, or for free-standing diagnostic and treatment centers—or whatever they may be called—can be met through other programs which provide federal assistance. The Hill-Burton program is not the appropriate vehicle for grants or priorities for such separated facilities. Nothing has been demonstrated which indicates either public benefit or public acceptance for this concept of providing ambulatory medical care through hospital operated, rather than physician operated, neighborhood clinics."

MEDICAL NEWS IN TENNESSEE

University of Tennessee College of Medicine

Dr. Lemuel W. Diggs, professor emeritus, University of Tennessee College of Medicine, was honored at a symposium, March 28-29, during a meeting of the Memphis Academy of Internal Medicine. Dr. Diggs retired December 31, 1968, as Goodman Professor of Medicine and chief of the section of clinical pathology. Speakers for the symposium were long-time friends of Dr. Diggs, Dr. William N. Valentine, professor and chairman, Department of Medicine, UCLA College of Medicine, and Dr. C. Lockhard Conley, professor and chairman, Department of Medicine, Johns Hopkins School of Medicine. Dr. Valentine, the discoverer of several new enzyme abnormalities, spoke on "Heredity Enzyme Abnormalities of Red Blood Cells". Dr. Conley spoke on "The Development of Knowledge Pertaining to Hemoglobinopathies" and gave a historical review of the role Dr. Diggs and other clinicians have fulfilled in this field.

Four members of the U. T. medical faculty were recently elected to serve as



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Dosage: For adults: One or two tablespoons of liquid or one or two swallow tablets three times daily; depending on severity.

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officers of the Academy. Dr. Henry Packer, chairman and professor of preventive medicine, was named president; Dr. Jean Hawkes, clinical professor of endocrinology, vice-president; Dr. A. L. Bellott, clinical associate professor of endocrinology, treasurer; and Dr. Marion Dugdale, associate professor of hematology, secretary.

★

Dr. Kenneth E. Lindsay, chief of staff at Memphis Veterans Administration Hospital, has been named Assistant Dean for Veterans Hospital Affairs in the College of Medicine. Dr. Lindsay's appointment will bring closer cooperation between the medical school and the veterans hospital in the areas of education and research. In addition to his duties at the Memphis Veterans Administration Hospital, and his new appointment, Dr. Lindsay is assistant professor of physical medicine and rehabilitation on the U. T. faculty. Born in Oreboro, Sweden, Dr. Lindsay received his M.D. from Loma Linda University School of Medicine in 1951.

★

Participating Faculty—Dr. J. H. Garcia, associate professor, pathology and neurology, presented a paper on ultrastructure of spinal cord oligodendroglioma before the annual meeting of the College of American Pathologists, February 26, in Los Angeles. . . . Dr. J. L. Khanna, associate professor of psychiatry, spoke on "Psychological Assessment Across Cultures" at the Southeastern Psychological Association meeting in New Orleans on February 28.

★

Grants—The Department of Preventive Medicine, University of Tennessee Medical Units, has received a five-year grant of $51,600 from USPHS. It will be administered by Dr. Henry Packer, chairman of the department, who will serve as coordinator of the joint UT-Memphis and Shelby County Health Department project. Preventive medicine faculty will serve as preceptors to provide apprenticeship training in public health to off-quarter medical students.

A $442,000 five-year grant has been awarded the Anatomy Department by USPHS to continue and expand the graduate program in anatomical sciences. Dr. G. Gordon Robertson is department chairman.

$78,224 has been awarded Lorraine Kraus, Ph.D., associate professor of biochemistry, by the Institute of Arthritis and Metabolic Disease of USPHS. The three-year grant to investigate the chemistry of sickle cell anemia variants will enable Dr. Kraus to do further research on Hemoglobin Memphis. This abnormality was identified by Dr. Kraus and her husband, Alfred Kraus, M.D, professor of hematology at U.T.

St. Jude Children's Research Hospital

Three St. Jude Children's Research Hospital physicians reported results of recent medical studies before the annual meeting of the American Association for Cancer Research which was held March 22-25 in San Francisco.

Drs. Charles B. Pratt, H. Durrell Johnson and Charlene P. Holton presented research papers at the meeting, which was attended by physicians and research scientists from throughout the nation, all engaged in cancer-related research.

Dr. Pratt reported on the use of acetylenic carbamate in treating children with advanced leukemia and malignant solid tumors; Dr. Johnson reported on a pneumonia affecting children with cancer; and Dr. Holton, now at Denver Children's Hospital, presented her findings related to treatment of children with a combination of the drugs daunomycin, vincristine and prednisone.

Annual Hale-McMillan Lecture

Dr. Richard C. Lillehei, professor of surgery at the University of Minnesota Medical School, presented the annual Hale-McMillan Lecture at Meharry Medical College on April 10th. Dr. Lillehei's subject was "The Experimental Basis for and the Clinical Application of Transplanation of the Pancreas."

PERSONAL NEWS

Dr. Bland W. Cannon, Memphis, neurosurgeon and a leader in developing health care programs throughout the Mid-South, has been appointed to

the National Advisory Council on Regional Medical Programs. The sixteen-member Council advises on policy and regulations, and reviews funding on programs currently amounting to approximately $92 million a year by fifty-five medical regions, including the Memphis and the Tennessee Mid-South Regional Medical Programs.

Dr. William B. Wadlington has been named "Outstanding Citizen of the Year" by the Donelson Civitan Club. Dr. Wadlington has been a resident of Donelson since 1955 and has been active in its growth through his work and efforts in the schools and civic affairs.

The Earl Campbell Clinic, Chattanooga, has announced the association of **Dr. Ronald Eith** for practice in allergy. A native of Covington, Kentucky, and graduate of the University of Tennessee, he was trained in pediatrics at Indiana University; following a year at the T. C. Thompson Children's Hospital in Chattanooga, he had completed a fellowship in allergy at the University of Kentucky.

Dr. Swan Burrus, Jr. has been named chief of staff of the Jackson-Madison County General Hospital for 1969. **Dr. E. W. Edwards** was chosen to serve as assistant chief.

Dr. David T. Watson, Knoxville, has been elected to active membership in the American Academy of General Practice. Re-elected to active membership in the AAGP were: **Drs. Spencer Y. Bell, John H. Burkhart,** and **Richard J. Erickson** of Knoxville; and **Drs. Boyd P. Davidson, Norman L. Henderson, Villard Parrish** of Lawrenceburg.

Announcement has been made of the association of **Dr. William K. Dwyer** with Dr. Joseph W. Graves and Dr. William Robert Fowler in the practice of general surgery in Chattanooga. Dr. Dwyer, a graduate of the University of Tennessee, received his graduate training in surgery at Michael Reese Hospital, Chicago, the University of Tennessee, and the Lahey Clinic in Boston. He is a diplomate of the American Board of Surgeons and is a member of the staff of Baroness Erlanger Hospital, T. C. Thompson Children's Hospital and Memorial Hospital.

Dr. William N. Smith, New Tazewell, has been appointed by Governor Ellington to the Tennessee Governor's Committee on Employment of the Handicapped. Dr. Smith will coordinate the efforts in Claiborne County to find both job opportunities and rehabilitation services for the handicapped.

Dr. Lawrence L. Cohen is the recipient of the Memphis Kiwanis Club's first Distinguished Service Award. The award was presented "for his unselfish service to the community and club".

Dr. John C. McKenzie, Athens, was installed as a Fellow of the American College of Obstetricians and Gynecologists at its annual meeting, April 28-May 1, in Bal Harbour, Florida.

Dr. Ralph R. Braund, clinical associate professor of surgery at the University of Tennessee College of Medicine, has been named president of the Society for Surgery of the Head and Neck. His election occurred during the Society's annual meeting held recently in Mexico City.

Dr. Russell T. Birmingham, Nashville, has been named vice chief of staff at Mid-State Baptist Hospital.

Dr. Thomas F. Paine, Jr., chief of the department of medicine, Metropolitan General Hospital, Nashville, has been appointed as a member of the National Advisory Allergy and Infectious Diseases Council. Members of the Council serve as advisors on matters relating to the National Institutes of Health program of grants for research and training in allergy, microbiology and immunology. His tenure as a member of the Council began on February 1 and will continue through January, 1973.

Dr. R. H. Kampmeier, Nashville, recently served as one of a faculty of five on the Medical Seminar sponsored by the Ohio Academy of General Practice at Acapulco, Mexico.

ANNOUNCEMENTS

Calendar of Meetings, 1969

National

June 2-5	Southwestern Surgical Congress, Sahara Tahoe Hotel, Lake Tahoe, Nevada
June 2-6	American College of Allergists, Hilton Hotel, Washington, D. C.
June 9-11	American Neurological Association, Beverly Hilton, Los Angeles
June 16-19	American Proctologic Society, Statler Hilton, Boston
June 20-22	American Association of Neuropathologists, Park Plaza Hotel, New Haven, Conn.
June 23-26	American Orthopaedic Association, The Homestead, Hot Springs, Va.
June 28-29	American Diabetes Association, Hotel Roosevelt, New York
July 12-13	Society for Surgery of the Alimentary Tract, Barbizon Plaza, New York
July 12-13	Society for Vascular Surgery, New York
July 13-17	American Medical Association, New York
Aug. 10-15	American Congress of Rehabilitation Medicine, Palmer House, Chicago
Aug. 21-22	AMA Communications Institute, Drake Hotel, Chicago
Sept. 2-6	International Tuberculosis Conference, Waldorf Astoria Hotel, New York
Sept. 4-6	American Association of Obste-

	tricians and Gynecologists (Annual Meeting), The Homestead, Hot Springs, Va.
Sept. 13-19	American Electroencephalographic Society, El Cortez Hotel, San Diego, Calif.
Sept. 14-20	American Society of Clinical Pathologists, Palmer House, Chicago
Sept. 14-20	College of American Pathologists, Palmer House, Chicago
Sept. 14-20	International Congress of Electroencephalography and Clinical Neurophysiology, El Cortez Hotel, San Diego, Calif.
Sept. 16-20	Congress of Neurological Surgeons, Sheraton-Boston Hotel, Boston
Sept. 21-27	World Congresses of Neurological Sciences (9th International Congress of Neurology and 4th International Congress of Neurological Surgery), New York Hilton, New York
Sept. 26-Oct. 3	American Academy of General Practice, Philadelphia
Sept. 30-Oct.3	American Roentgen Ray Society, Washington-Hilton Washington, D. C.

Course in Postgraduate Gastroenterology

The American College of Gastroenterology announces that its annual course in postgraduate gastroenterology will be given at The Rice Hotel in Houston, Texas, October 23-25. The faculty for the course will be drawn from the medical schools in and around Houston and the program, subject to change, will include: Symposium on the Esophagus; Symposium on Cancer of the Stomach; Symposium on the Liver; Symposium on Malabsorption Syndrome; and Gastrointestinal Problems in Space Medicine. In addition, there will be other papers pertaining to the advances in diagnosis and treatment of various gastrointestinal diseases.

For further information and enrollment, write to the American College of Gastroenterology, 299 Broadway, New York, N. Y., 10007.

Annual Otolaryngologic Assembly

The Annual Otolaryngologic Assembly of 1969 will be held October 4-10, in the Illinois Eye and Ear Infirmary at the Medical Center, Chicago. The Department of Otolaryngology of the College of Medicine of the University of Illinois offers a condensed postgraduate basic and clinical program for practicing otolaryngologists under the direction of Dr. Emanuel M. Skolnik. It is designed to bring to specialists current information in medical and surgical otorhinolaryngology.

Interested otolaryngologists should direct their inquiries to: Otolaryngology, P. O. Box 6998, Chicago, Illinois, 60680.

American College of Physicians Postgraduate Courses

The following postgraduate courses are scheduled by the American College of Physicians for 1969:

Aug. 21-23	"Clinical Gerontology", to be held at the Shoreham Hotel, Washington, D. C.; sponsored by University of California, Los Angeles; Ralph Goldman, M.D., F.A.C.P., Director; Reubin Andres, M.D., Co-director.
Sept.	"Medical Oncology", University of Minnesota Medical School, Minneapolis, Minn.; B. J. Kennedy, M.D., F.A.C.P., Director
Oct. 1-4	"Vascular Disease," Mayo Graduate School of Medicine (University of Minnesota) and Mayo Clinic, Rochester, Minn.; Alexander Schirger, M.D., F.A.C.P., and P. J. Osmundson, M.D., F.A.C.P., Co-directors.
Oct. 20-24	"Office Psychiatry for Internists", The Faulkner Hospital, Boston, Mass.; Jack R. Ewalt, M.D., Director.
Nov. 3-7	"Mechanisms of Disease", University of Chicago, Chicago, Ill., Hans H. Hecht, M.D., F.A.C.P., and Alfred P. Fishman, M.D., F.A.C.P., Co-directors.
Nov. 3-7	"Nuclear Medicine: Diagnosis and Treatment of Disease with Radionuclides Given Internally", University of Michigan Medical Center, Ann Arbor, Mich.; William H. Beierwaltes, M.D., Director.

Seminar in Psychiatry Central State Hospital

The annual Seminar sponsored jointly by Vanderbilt University School of Medicine, Tennessee Department of Mental Health, Tennessee Academy of General Practice, Nashville Pediatric Society and Central State Psychiatric Hospital will be presented on Thursday, May 29, at the Central State Psychiatric Hospital. It will have as its theme "Psychiatric Problems of the Young," the faculty including: Dexter M. Bullard, Jr., M.D., Children's Hospital Medical Center, Boston; James J. Gill, M.D., University Health Service, Harvard University, Cambridge; James Spurlock, M.D., Professor of Psychiatry, Meharry Medical College; David Karzon, M.D., Professor of Pediatrics, Vanderbilt University School of Medicine.

Plan to be a guest of the Central State Psychiatric Hospital.

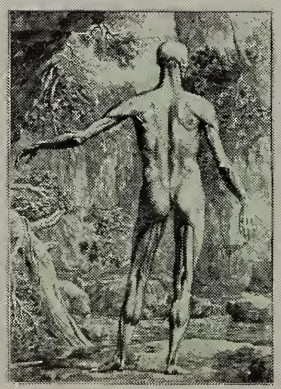
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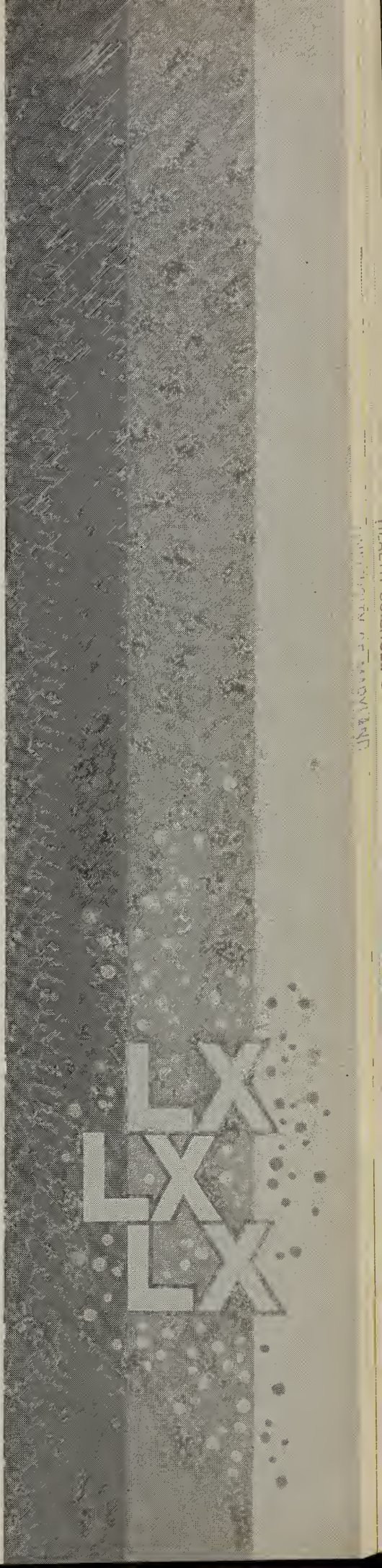
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(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville, Tennessee 37203.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

If reprints are desired, the requested number should be indicated in the letter accompanying the manuscript. The author will be billed by the publisher.

Journal of the Tennessee Medical Association
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VOLUME 61 JUNE, 1969 NO. 6

Abstract of the Proceedings of the House of Delegates Of the Tennessee Medical Association Gatlinburg, Tennessee—April 10-12, 1969

The House of Delegates of the Tennessee Medical Association met in the Gatlinburg Auditorium in Gatlinburg, Tennessee, April 10-12, 1969, in conjunction with the 134th Annual Meeting of the Association, with Dr. Tom E. Nesbitt, Speaker of the House and Dr. R. L. DeSaussure, Vice-Speaker, presiding.

The invocation was rendered by Dr. John H. Burkhart, Knoxville:

DR. JOHN H. BURKHART: "Almighty God, our Father, Thou who did make man in Thine own image and charge him to care for and be concerned about his fellowman, we seek Thy blessing on this House of Delegates, representatives of a noble profession, the chief aim of which is and ought to be the carrying out of Thy charge. Help us to be capable, kind, considerate and diligent in the performance of Thy purposes. Bless us as we convene today to review our past, to contemplate our present and to plan our future. In matters that seem routine and often tiresome, give us patience to do those things which may be necessary to the orderly procedure of this House of Delegates. In those matters which require expression of ideas, careful consideration of various aspects, and sometimes controversial positions and conflicting opinions, give us each the openness of mind to be receptive, the stoutness of principle to be fair; the courage of conviction to be counted, and the greatness of heart to be tolerant of the opposite view. Keep us always aware of the nobility of the work to which we are called, and may the business of this Association be Thy business and the work of its members Thy work, for we are nothing if we are not acceptable in Thy judgment. Amen."

1967 Minutes Approved

The Speaker announced that the Minutes of the last regular session were reproduced in the June, 1968, issue of the JOURNAL of TMA and requested that a motion be presented to approve the proceedings as published. It was moved and duly seconded that the Minutes of the 1968 regular session be approved as published in the June, 1968, issue of the JOURNAL. **The motion was adopted.**

Reference Committees

The Speaker announced the personnel of the Reference Committees to consider reports, resolutions, amendments, and all matters requiring action by the House of Delegates.

Committee on Credentials

Nat E. Hyder, Jr., Chairman, Erwin
E. M. Dudney, Gainesboro
Tom C. Wood, Paris

Committee on Amendments to the Constitution and By-Laws

John H. Burkhart, Chairman, Knoxville
Luthur Beazley, Nashville
J. Kelley Avery, Union City

Committee on Resolutions

C. Gordon Peerman, Chairman, Nashville
David H. Turner, Chattanooga
Henry Rudner, Jr., Memphis

Committee on Reports of Officers

Tinnin Martin, Chairman, Memphis
F. J. Malone, Jr., Clarksville
David P. McCallie, Chattanooga

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Committee on Reports of Standing Committees
Louis Rosenfeld, Chairman, Nashville
Jacob T. Bradsher, Knoxville
John B. Dorian, Memphis

Committee on Reports of Special Committees
A. Roy Tyrer, Jr., Chairman, Memphis
Ellis U. Harr, Bristol
John O. Williams, Mt. Pleasant

Committee on Outstanding Physician of the Year
John H. Burkhart, Chairman, Knoxville
G. Baker Hubbard, Jackson
K. M. Kressenberg, Pulaski

Nominating Committee

As required in the By-Laws, the Board of Trustees, in its January meeting, appointed a Nominating Committee with representatives from each of the three grand divisions of the state. The Speaker announced the personnel of the committee:

East Tennessee:
E. Kent Carter, Kingsport
John H. Burkhart, Knoxville
Harry A. Stone, Chattanooga

West Tennessee:
C. D. Hawkes, Memphis
Byron O. Garner, Union City
Thomas K. Ballard, Jackson

Middle Tennessee:
W. O. Vaughan, Nashville
Charles A. Trahern, Clarksville
Joseph L. Willoughby, Franklin

ELECTION OF OFFICERS AND COUNCILORS
April 12, 1969

The report of the Nominating Committee was presented in the second session of the House of Delegates on Saturday, April 12. Nominees submitted by the Committee were voted upon individually and in each instance, the Speaker called for additional nominations from the floor.

President-Elect—Tom E. Nesbitt, Nashville

Speaker—House of Delegates—R. L. DeSaussure, Memphis

Vice Speaker—House of Delegates—R. H. Haralson, Jr., Maryville

Vice-President (East Tennessee)—Joe E. Tittle, Oak Ridge

Vice-President (Middle Tennessee)—Wm. H. Edwards, Nashville

Vice-President (West Tennessee)—Charles N. Hickman, Bells

Secretary—C. Gordon Peerman, Nashville

AMA Delegate (West Tennessee)—Bland W. Cannon, Memphis (January, 1970-December, 1971)

AMA Alternate Delegate (West Tennessee)—Julian K. Welch, Jr., Brownsville (January, 1970-December 1971)

AMA Delegate (Middle Tennessee)—W. O. Vaughan, Nashville (January 1970-December 1971)

AMA Alternate Delegate (Middle Tennessee)—Wm. F. Meacham, Nashville (January 1970-December 1971)

TRUSTEES:
East Tennessee—J. J. Range, Johnson City (1972)
West Tennessee—Byron O. Garner, Union City (1972)
West Tennessee—Wm. T. Satterfield, Sr., Memphis (1972)
Middle Tennessee—John O. Williams, Mt. Pleasant (1972)

COUNCILORS:
Second District—J. Marsh Frere, Jr., Knoxville (1971)
Fourth District—Claude M. Williams, Cookeville (1971)
Sixth District—B. K. Hibbett, III, Nashville (1971)
Eighth District—Lee Rush, Jr., Somerville (1971)
Tenth District—B. G. Mitchell, Memphis (1971)

Nominees for Public Health Council: (Three from East Tennessee, three from Middle Tennessee, and three from West Tennessee. One from each grand division will be subsequently appointed by the Governor.)

East Tennessee:
John W. Adams, Jr., Chattanooga
Jacob T. Bradsher, Knoxville
Harmon L. Monroe, Erwin

West Tennessee:
J. Kelley Avery, Union City

John Duckworth, Memphis
Blair D. Erb, Jackson

Middle Tennessee:

O. Morse Kochtitzky, Nashville
Wm. A. Hensley, Cookeville
Jos. L. Willoughby, Franklin

Nominees for Board of Trustees of the State Tuberculosis Hospitals: Three from East Tennessee, excluding Hamilton County and the ten surrounding counties. One nominee will be subsequently appointed by the Governor.)

Richard Willingham, Knoxville
Charles L. Roach, Sevierville
Robert E. Maddox, Kingsport

THE ABOVE NOMINEES WERE ELECTED BY THE HOUSE OF DELEGATES

TENNESSEE'S OUTSTANDING PHYSICIAN

Dr. Carroll H. Long, *Johnson City, was named Outstanding Physician of the Year in Tennessee for 1969.*

Dr. Long received his undergraduate degree from Princeton University in 1926, studied at Edinburgh University for two years, and was awarded the M.D. degree from the University of Pennsylvania in 1930. He also earned the M.S. degree in Surgery from Tulane University in 1941 and returned to Johnson City to begin his medical practice. Dr. Long was instrumental in establishing the Pneumothorax Clinic at Appalachian Hospital as well as the first Cancer Clinic at Johnson City's Memorial Hospital. He has authored more than a dozen scientific articles and is a Past-President of the Tennessee Chapter of the American College of Surgeons.

Dr. Long is well known for his church and civic work in Johnson City. He is a Past-President of the Johnson City Kiwanis Club and has been elected to the City Board of Education, City Board of Commissions and in 1963 was elected Mayor of Johnson City.

A member of the First United Methodist Church in Johnson City, Dr. Long was recently honored for his outstanding service to church-related health and welfare ministries throughout the Holston Conference by being named to the United Methodist Hall of Fame in Philanthropy. He has served as a missionary in Alaska, India, and Nepal and currently heads a fund raising drive for needed hospital construction in Yadgiri, India.

Dr. Long currently serves as a Trustee for four colleges—Emory and Henry, Tennessee Wesleyan, Hiwassee and Morristown College.

AMENDMENTS TO CONSTITUTION AND BY-LAWS

Amendments to Constitution Lying on Table

The Speaker called for action on amendments to the Constitution lying on the Table from the last regular session of the House of Delegates. Amendment to Constitution No. 1-68 was presented to the House of Delegates at its initial meeting in 1968 and referred to the Reference Committee for consideration. Amendment to Constitution No. 2-68 was presented in the second session and the 1968 Reference Committee deferred recommendation to the 1969 Committee. As required in the Constitution, copies of the amendments and the recommendation of the 1968 Reference Committee were forwarded sixty days in advance of the meeting to all county medical societies.

Amendment to Constitution No. 1-68

Amend Article IV, Section 2, of the Constitution of the Tennessee Medical Association to read:

"The Active Members of this Association shall be active members of the County Medical Societies, **and no County Medical Society shall grant active membership therein unless the membership includes membership in the Tennessee Medical Association** and whose dues have been paid for the current year."

Section 2 at present: "The Active Members of this Association shall be active members of the Component Medical Societies who have been certified to the Secretary of this Association and whose dues have been paid for the current year."

The Reference Committee on Amendments to the Constitution and By-Laws in 1968 commented: "All of the testimony heard on this proposed amendment was on the negative side. The opposition was expressed on the grounds that this constituted compulsion originating at a state level on a matter which should originate and be considered on the county level, and that although the purpose of encouraging membership in the Tennessee Medical Association was laudable the method was unacceptable. The Reference Committee feels that although it is highly desirable for county medical societies to encourage in every feasible way that their members also be members of the Tennessee Medical Association and the American Medical Association, the

impetus for this in any obligatory provision should originate on the county level." The Reference Committee recommended that Constitutional Amendment No. 1-68 not be adopted.

ACTION: **THE HOUSE APPROVED THE RECOMMENDATION OF THE REFERENCE COMMITTEE AND CONSTITUTIONAL AMENDMENT NO. 1-68 WAS NOT ADOPTED.**

Amendment to Constitution No. 2-68

Amend Article V of the Constitution, by inserting the words, "elected officials of the American Medical Association, provided such officials are members in good standing of the Tennessee Medical Association." Article V would then read:

"The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the Component Societies; (2) ex-officio the Officers; (3) the five most recent surviving ex-presidents of the Association, except that all ex-Presidents who were living in April 1956 shall be members for life; (4) the Association's delegates to the American Medical Association; **(5) the elected officials of the American Medical Association, provided such officials are members in good standing of the Tennessee Medical Association,** the Commissioner of Public Health, and the Commissioner of Mental Health for the State of Tennessee, provided such Commissioner of Public Health or Mental Health is a member in good standing of the Tennessee Medical Association."

The Reference Committee on Amendments to the Constitution and By-Laws in 1969 commented: "This Amendment would add to the composition of the House of Delegates the elected officials of the American Medical Association, provided such officials are members in good standing of the Tennessee Medical Association. No objection has been expressed to the Reference Committee on this change, and it would seem to the Committee to be a desirable provision on the grounds that any bona fide member of the Tennessee Medical Association who holds a position of responsibility to which he has been elected by the House of Delegates of the American Medical Association should be not only entitled to membership in, but also utilized by the House of Delegates of the Tennessee Medical Association." The Reference Committee recommended adoption of the Amendment.

ACTION: **THE HOUSE APPROVED THE RECOMMENDATION OF THE REFERENCE COMMITTEE AND CONSTITUTIONAL AMENDMENT NO. 2-68 WAS ADOPTED.**

Amendments Introduced in 1969

The Reference Committee on Amendments to the Constitution and By-Laws considers all proposed amendments to both the Constitution and By-Laws. Under the required waiting period, all Constitutional Amendments introduced in 1969 will be presented for action by the House of Delegates in 1970. Three amendments to the Constitution and two amendments to the By-Laws were presented to the House of Delegates and referred to the Reference Committee for consideration.

Amendment to Constitution—No. 1-69

Amend Article VIII, Section 2, Paragraph 1 of the Constitution to read:

"The Board of Trustees shall consist of the President of the Association, the Speaker of the House of Delegates, **the Vice-Speaker of the House of Delegates,** the immediate Past-President, the President-Elect, the Secretary, and six members elected by the House of Delegates as hereinafter provided."

Section 2, Paragraph 1 at present: "The Board of Trustees shall consist of the President of the Association, the Speaker of the House of Delegates, the immediate Past-President, the President-Elect, the Secretary, and six members elected by the House of Delegates as hereinafter provided."

The Reference Committee commented on testimony heard on the proposed amendment, and recommended that Amendment No. 1-69 not be adopted.

TO BE ACTED UPON BY THE HOUSE OF DELEGATES IN THE NEXT REGULAR SESSION IN 1970.

Amendment to Constitution No. 2-69

Amend Article VIII, Section 4, of the Constitution of the Tennessee Medical Association to read:

"The President-Elect, the three Vice-Presidents, a Secretary, the Speaker of the House of Delegates, **and the Vice-Speaker of the House of Delegates** shall be elected annually for one year. The Speaker of the House of Delegates, the Vice-Speaker of the House of Delegates,

and the Secretary shall hold office for not more than **three consecutive years. No two of these three officers shall be from the same grand division of the state.** The President-Elect will assume office as President of the Association at the expiration of the term of the President."

Section 4 at present: "The President-Elect, the three Vice-Presidents, a Secretary and the Speaker of the House of Delegates shall be elected annually for one year. The Speaker of the House and the Secretary shall hold office for not more than four consecutive years. The President-Elect shall assume office as President at the expiration of the term of the President."

The Reference Committee commented on testimony heard on the amendment and recommended: (1) rejection of the proposal to prohibit any two of the offices of Speaker, Vice-Speaker, or Secretary from being from the same grand division of the state; (2) rejection of the provision that the officers named shall hold office for not more than three consecutive years; and (3) adoption of the portion of the amendment that would add the Vice-Speaker to the list of officers who are elected annually for one year.

TO BE ACTED UPON BY THE HOUSE OF DELEGATES IN THE NEXT REGULAR SESSION IN 1970.

Amendment to Constitution No. 3-69

Amend Article VIII, Section 7, of the Constitution of the Tennessee Medical Association to read:

"All officers of the Association shall be elected at the second regular session of the House of Delegates **and they shall assume office at the close of the final regular session of the House of Delegates."**

Section 7 at present: "All officers of the Association shall be elected at the second regular session of the House of Delegates, and they shall assume office when elected."

The Reference Committee recommended adoption of Amendment No. 3-69.

TO BE ACTED UPON BY THE HOUSE OF DELEGATES IN THE NEXT REGULAR SESSION IN 1970.

Amendment to By-Laws No. 1-69

Amend Chapter VIII, Section 18, by deleting the first paragraph of Section 18, and substituting the following:

"The Communications and Public Service Committee shall be appointed by the Board of Trustees and shall consist of nine members, representing the three grand divisions of the state. Three members shall be from the East, three from Middle, and three from West Tennessee. The Editor of the Journal will be ex-officio, a member of this Committee."

Section 18 at present: "The Communications and Public Service Committee—this Committee shall be appointed by the Board of Trustees and shall consist of one representative from each Councilor District and six members from the state-at-large, two members being appointed from each grand division. The Editor will be, ex-officio, a member of this Committee."

The Reference Committee recommended adoption of the Amendment to the By-Laws, No. 1-69.

ACTION: **ADOPTED**

Amendment to By-Laws No. 2-69

Amend Chapter VI, Section 4, of the By-Laws of the Tennessee Medical Association to read:

"The Speaker of the House of Delegates shall preside over that body and perform the usual duties of such officer. He shall sign the minutes of its transactions when same have been read and approved by the House. In the event of his absence for any cause, or upon request of the Speaker, the Vice-Speaker of the House of Delegates shall perform these duties. The Speaker of the House of Delegates **and the Vice-Speaker of the House of Delegates** shall be ex-officio members of the Board of Trustees.

Section 4 at present: "The Speaker of the House of Delegates shall preside over that body and perform the usual duties of such officer. He shall sign the minutes of its transactions when same have been read and approved by the House. In the event of his absence for any cause, or upon request of the Speaker, the Vice-Speaker of the House of Delegates shall perform these duties. The Speaker shall also be ex-officio member of the Board of Trustees."

The Reference Committee commented: "This proposed Amendment is contingent upon the action which will be taken by the House of Delegates in 1970 regarding the Amendment to the Constitution which would add the Vice-Speaker to the Board of Trustees. In view of this, it is not in order for the House of Delegates to act upon this proposed amendment at this session." The Reference Committee recommended that Amendment to By-Laws No. 2-69 be referred without further recommendation to the Reference Committee on Amendments to the Constitution and By-Laws of the next annual meeting.

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ACTION: **THE HOUSE APPROVED THE RECOMMENDATION OF THE REFERENCE COMMITTEE AND AMENDMENT TO BY-LAWS NO. 2-69 WILL BE ACTED UPON IN THE NEXT REGULAR SESSION IN 1970.**

RESOLUTIONS

The Reference Committee on Resolutions has the option of recommending a resolution for adoption or rejection, for adoption as amended or substituted, for referral, or for no action. The resolutions shown are in the form in which the House of Delegates **adopted**, **referred** or **rejected** them.

RESOLUTION NO. 1-69

Change in the Format of the Sessions of the House of Delegates

By: Board of Trustees

(An amendment recommended by the Reference Committee and approved by the House of Delegates is shown in black-faced type.)

Whereas, the Planning and Development Committee of the Board of Trustees has extensively studied the format of the annual meeting and sessions of the House of Delegates and has found that the annual meeting and sessions of the House of the Tennessee Medical Association are often crowded for time sufficient to conduct the affairs of the Tennessee Medical Association, and

Whereas, it has been difficult for the delegates to have sufficient time to participate in the hearings of the Reference Committees and the scientific sessions, thus making it difficult for delegates to have reports from the Reference Committees in their hands for consideration prior to the second session of the House of Delegates, and

Whereas, a solution to this has been presented by the Planning and Development Committee and recommended by the Board of Trustees and is herewith presented to the House of Delegates; now therefore be it

RESOLVED, that effective with the annual meeting in 1970, it is recommended that the first session of the House of Delegates shall convene on the afternoon and evening, prior to the opening of the annual meeting—the House of Delegates to begin its first session at 4:00 p.m. with a break at 6:00 p.m. for a dinner of the delegates, after which the House would reconvene for the completion of the business of the first session, and be it further

RESOLVED, that during the first session of the House, including the dinner meeting, that this could be the place and time for making presentations of awards usually made at the President's Banquet, thus enabling a saving of time and conflict **with** other activities during the annual meeting and the sessions of the House of Delegates.

The Reference Committee recommended adoption of Resolution No. 1-69 as amended.

ACTION: **ADOPTED AS AMENDED**

RESOLUTION NO. 2-69

Annual Meetings of Medical Societies and Hospital Staffs for Discussion of Legal Problems

By: Board of Trustees

Whereas, physicians and hospitals are being faced with an increasing number of legal problems and it is desirable that the members of such societies and the medical staffs of hospitals be kept informed of such developments; now therefore be it

RESOLVED, that all county medical societies and medical staffs of hospitals be, and they are hereby, urged to hold at least one meeting each year for the purpose of discussing current legal problems relating to physicians and hospitals.

The Reference Committee on Resolutions recommended adoption of Resolution No. 2-69.

ACTION: **ADOPTED**

RESOLUTION NO. 3-69

Policy Statement on Guidelines for Heart Transplantation

By: Board of Trustees

(An amendment recommended by the Reference Committee and approved by the House of Delegates deleted the words, "in keeping with the attached statement on heart transplantation" at the end of the Resolve.)

Whereas, heart transplants have attracted great interest within the medical profession, to the lay public and news media, and

Whereas, heart transplantation has brought certain medical, ethical and legal questions into critical focus, and

Whereas, it is highly likely that in the near future, heart transplants may be performed in the State of Tennessee, and

Whereas, the American Medical Association at its recent clinical meeting in Miami, developed guidelines for the medical profession which was favorably approved by the House of Delegates of the American Medical Association and recommended to its constituent associations; now therefore be it

RESOLVED, that the House of Delegates of the Tennessee Medical Association approve as policy, the guidelines on heart transplantation as adopted

by the American Medical Association through its House of Delegates, such statement to become the policy of the Tennessee Medical Association.

AMA GUIDELINES ON HEART TRANSPLANTATIONS

The initiation of clinical heart transplantation has attracted a degree of interest both within the medical profession and among the lay public seldom equalled by any new development in medicine. This interest has taken the form of a continuing debate and discussion as to the medical, ethical, moral and legal aspects of heart transplantation. This continuing debate within the medical profession, in the public press and in legislative councils can vitally affect not only the practice of organ transplantation but the form and pace of medical progress. In view of the importance clinical heart transplantation has assumed, not only as a possible therapeutic technique for certain forms of advanced heart disease but as a focal point for larger questions regarding physician responsibility, the nature and determination of death, the protocol of clinical investigation, and the direction of future medical research, the American Medical Association recommends the following guidelines.

1. The preservation of good medical practice demands that the evolution of therapy be orderly. Surgical skill to perform a cardiac transplant is not enough to justify a program of heart transplantation. The staff of a hospital or medical center planning to initiate such a program should have: (1) adequate background in animal research so that experience is gained as to the problems, potentials and limitations of cardiac transplantation; (2) experience in immunosuppressive therapy and an adequate source of antilymphocyte globulin of known quality; (3) a protocol of clinical research adequate to follow and evaluate the course of the patient. The need for knowledge about the short and long-term effects of heart transplantation is critical and to fail in this third requirement is to do a disservice not only to the patient but to medicine. To facilitate the collection and dissemination of scientific information it is recommended that there be established within the United States a Heart Transplant Registry as a means of facilitating the exchange of information among investigators and as an aid to mutual cooperation among the various medical centers.
2. Due regard for the welfare and safety of each individual patient is paramount in the initiation of any new mode of therapy. Risk is unavoidable. But the risk is permissible when the limitations of accepted therapy impose alternatives which, in the informed view of the patient and the best judgment of his physician, justify the risk.

Initiation of human heart transplantation has been criticized by some as premature. The critics maintain that immunosuppressive techniques are not of an order to justify use in a patient of uncertain prognosis a procedure for which there is no alternative means of life support should the procedure fail. In the opinion of others, the experience and knowledge gained in the animal laboratory —an indication, for example, that the transplanted heart can function for extended periods—justify its investigative use in patients in imminent danger of death from progressive congestive heart failure.

This question can be resolved now only by the evaluation of the long-term results of human heart transplantation.

Until such evaluation is possible, the procedure must be regarded as investigative. Its use should be restricted to patients for whom there is no other means of therapy offering a life-sustaining prognosis. The best medical care of the potential recipient demands that he be carefully evaluated. When desirable, those responsible for the patient's care should seek consultive opinion independent of the transplantation team.

It is well established that the transplanted heart can and usually does function in the post-operative period. This initial success must not be cause for undue optimism about the long-term results, nor does it warrant extension of the procedure to patients in whom it might be regarded as palliative or preventive rather than lifesaving.

Heart transplantation has brought certain medical, ethical and legal questions into critical focus. Paramount among them is the determination of death. The right of the prospective donor to the best possible medical care—a right which his potential role as organ donor must not be allowed to abrogate —must remain sacred. The growing ability of medical science to maintain some form of biological function for prolonged periods adds to the difficulty of defining the point of irreversible dissolution. The cause of death must be evident and of an irreversible type. The fact of death must be established, and must be demonstrated by adequate, current and acceptable scientific evidence in the opinion of the physician making the determination.

The determination of death in organ donors must be made by no less than two physicians not associated with the surgical team performing the transplant.

4. The potential for heart transplantation, whatever that may prove to be by subsequent clinical experience, will be severely limited by the shortage of potential organ donors. The disparity between need and supply in organ transplantation is not lim-

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ited to hearts, although it represents the widest imbalance, but characterizes all organ transplant programs.

To alleviate the shortage of transplantable organs the following is recommended: (1) adoption by the appropriate legislative bodies of the Uniform Anatomical Gift Act or similar laws to facilitate the donation of organs and to remove the confusion and medicolegal problems generated by conflicting laws in the several states. (2) initiation in centers where organ transplants have been accomplished or contemplated of cooperative donor organ programs to insure the best possible match between donor and recipient, bearing in mind that the evaluation of this match ultimately depends upon the best clinical judgment of the physicians involved.

It must be recognized, however, that there will never be sufficient numbers of human organs available to meet the potential demand for transplants. Research must continue into methods of organ storage and into development of artificial hearts and cardiac assistance devices. The feasibility of using xenografts must also be explored. Surgical repair of the diseased heart has undergone significant advances in recent years. The possibilities for further advances should be vigorously pursued. Basic research into the causes of heart disease and of hypertensive vascular disease is also of vital importance, since the only ultimate solution to the problem of heart disease lies in its prevention.

5. Human heart transplantation has been accompanied from the outset by a degree of public awareness and attention almost without parallel in medicine. Whereas some would prefer that publicity be withheld until the procedure is properly evaluated in approved scientific fashion, this has become impossible as regards heart transplantation. The dramatic overtones attendant upon the procedure and the seriousness of heart disease as a health problem combine to generate keen public interest.

This publicity poses special questions for the medical profession. The use of public news media for selfseeking purposes on the part of any physician has always been considered unethical. In view of the popular interest aroused by heart transplantation, those most immediately involved must be particularly careful to refrain from any conduct which could be construed as violating these ethical commitments. There is no place in medicine for rivalry for public plaudits.

In addition, public misunderstanding about the nature of clinical investigation, impatience with the need for cautious use and prolonged evaluation, and the disappointment and reaction that could follow should clinical experience indicate that heart transplantation is of limited value could seriously affect established procedures for the introduction of any new mode of therapy.

It is imperative, therefore, that the public be made fully aware of the potentialities and limitations of heart transplantation as those are currently understood and as that understanding is modified by subsequent experience. Moreover, the opportunity should be taken to acquaint the public with the problems attendant upon the introduction of new means of treatment and the rationale for the protocol that is followed. Only by preserving public confidence in the judgment of the physician, can the orderly progress of medicine be maintained.

The Reference Committee recommended adoption of Resolution No. 3-69 as amended.

ACTION: **ADOPTED AS AMENDED**

RESOLUTION NO. 4-69

Guiding Principles Regarding Delivery of Medical Care Services

By: Board of Trustees

(An amendment recommended by the Reference Committee and approved by the House of Delegates deleted the word, "properly," following the words, "usual fees for services," in Item 9 of the Resolve.)

Whereas, the number of parties, public and private, which profess interest in the efficient delivery of high quality medical care to all persons living in Tennessee is increasing year by year, and

Whereas, it is recognized that each of these interested parties must actively seek and maintain close communication and consultation with the others if the common goal is to be pursued cooperatively and for the benefit of all people, and

Whereas, the practicing Doctor of Medicine, duly licensed, is the prime deliverer of patient care in Tennessee today and, hence, is intensely interested in all proposals that may be advanced as possible methods of improving the health care system, whether such proposals are initiated by his own professional organizations or by other interested parties, and

Whereas, independent or unilateral actions proposed or implemented in this field by legislators, so-called "consumer" groups and/or health planning agencies that do not take into full account the opinions and professional expertise in patient care of practicing physicians are prone to be theoretical in concept and not in keeping with time-time-tested medical principles which have received wide public acceptance, and

Whereas, the Tennessee Medical Association is the representative professional organization of some 3,400 licensed Tennessee physicians, approximately 85% of whom are engaged in the private practice of medicine; now therefore be it

RESOLVED, that the House of Delegates of the Tennessee Medical Association reaffirm certain basic principles regarding the delivery of high quality medical care, as follows:

1. That communication and consultation with the Association be readily available at all times to all responsible parties having an interest in matters relating to the delivery of medical care services and to the public health.
2. That medical care of uniformly high quality be available to all persons living in Tennessee.
3. That the maintenance of high quality in medical care is of paramount importance, and that all other considerations are secondary to this goal.
4. That it is the responsibility of each practicing physician to help limit the total cost of health care by rendering and prescribing only those medical goods and services which are necessary to optimum care of his patients.
5. That the practicing Doctor of Medicine, duly licensed, is the prime deliverer of patient care to the people of Tennessee and has, with his colleagues, the responsibility of assuring that such care is of high quality.
6. That each practitioner, as an individual, is directly accountable for his professional acts and deportment to his patients, to his medical peers and to authorized licensing agencies, and that the public interest is well protected by such accountability; further, that lay (non-physician) control of, or interference with, professionally approved medical care policies and ethical practices is contrary to the public interest and should be prohibited at all levels of government.
7. That whether medical services are provided by physicians engaged in solo, partnership or group practice, and irrespective of what method for financing such services obtains, the patient must have freedom to choose his attending physician from among all those qualified and available in and to his community area of residence; the physician, except for emergency situations, must have freedom to accept or not to accept a patient into his professional care; and the patient's attending physician, with the patient's consent, must have freedom to select consultants among all those qualified and available in and to his community area of practice. Assignment by any third party of patient to physician or physician to patient, made without freedom of choice, is in violation of this principle and cannot be approved.
8. That units of organized medicine preferably at the county medical society level, shall have in being appropriately constituted committees which are readily available to all responsible sources to receive, review and render peer judgments on all questions having to do with medical ethics, the professional acts and fees of physician members, and the proper utilization of medical and related services rendered and/or prescribed by member physicians in the treatment of their patients.
9. That, if self-employed in a solo, partnership or group practice setting, the physician is entitled to receive from his patient, or on behalf of his patient from a third party, payment of his self-determined, usual fees for services rendered, provided that such usual fees are reasonable in that they fall within the levels of charges obtained in his community area of practice among a substantial majority of physicians of equivalent qualifications for equivalent services rendered. Corollary to this principle is the guarantee of organized medicine (in Tennessee, the Tennessee Medical Association) that if a physician's fee is questioned by the patient or by any other party legitimately concerned with the rendering of the service to the patient, such question shall be received and processed by the county medical society, as outlined in preceding paragraph (8).

The Reference Committee recommended adoption of Resolution No. 4-69 as amended.

ACTION: **ADOPTED AS AMENDED**

RESOLUTION NO. 5-69

Increase in Tennessee Medical Association Dues

By: Board of Trustees

Whereas, the Board of Trustees, after study and examination of all aspects of the Tennessee Medical Association's program of work, has found that the financial resources of the Association are not sufficient to conduct the program and activities necessary to carry out the responsibilities of this Association, and

Whereas, the annual expenditures of the Association have increased appreciably each year as demands upon the Tennessee Medical Association increase, essentially due to the greater utilization of the Tennessee Medical Association's services and the broadening activities of the Association, and

Whereas, additional work space is essential in the Tennessee Medical Association headquarters building since the present facility is now utilized to its maximum, making an addition to the building necessary. When the present building was erected in 1955, the Tennessee Medical Association had four employees where now there are nine employees, and

Whereas, in recent months, six new committees have been added and the inflationary spiral which has increased appreciably thus adding to the cost of Tennessee Medical Association operations. Based upon experience of the past two years, the

Board of Trustees finds the expenditures increase about 6% each year, and

Whereas, the Tennessee Medical Association's revenues have not kept pace with the increase in operating cost to conduct the business of the Association and publishing of the Journal. This is due to the fact that increased operating costs regularly exceed normal expectations in revenue, and

Whereas, the Tennessee Medical Association is currently one of the state medical associations in the Southeast and the United States with lower than average dues for this region and the nation, the average being nearly $80 per year. Tennessee Medical Association dues are only $55 per year per member; now therefore be it

RESOLVED, that the Board of Trustees of the Tennessee Medical Association unanimously recommends and urges the House of Delegates to approve an increase in the Tennessee Medical Association's annual dues in the amount of $25 per year per member, to become effective on January 1, 1970, after which the annual dues will be $80 per member per year.

The Reference Committee on Resolutions recommended adoption of Resolution No. 5-69.

ACTION: **ADOPTED**

RESOLUTION NO. 6-69

Opposition to Health, Education and Welfare Efforts to Take Over Confidential Records of Data Pertaining to Tennessee Physicians

By: Board of Trustees

Whereas, by tradition, custom and law, the confidences of patients to physicians has been a sacred trust, an inviolate confidence and not available for any purpose public, private, or personal, and

Whereas, the medical profession has served as the repository of this confidence and faith of the sick, injured, and distressed patients, and

Whereas, the Health, Education, and Welfare Department of the Federal Government has attempted in some instances to obtain confidential information concerning physicians from other sources including fiscal intermediaries in the Medicare program, and

Whereas, the Tennessee Medical Association is opposed to such steps where physicians' records or data is made available without the permission of the physician; now therefore be it

RESOLVED, that the Tennessee Medical Association, through action of this House of Delegates, go on record opposing any effort by the Health, Education, and Welfare Department to obtain confidential records or data pertaining to Tennessee physicians without their permission, and be it further

RESOLVED, that the Medicare fiscal intermediary in Tennessee be notified of this action, and further that the fiscal intermediary be urged to resist to the fullest extent any effort to obtain such data.

The Reference Committee on Resolutions recommended to the House of Delegates the following Substitute Resolution No. 6-69.

SUBSTITUTE RESOLUTION NO. 6-69

Opposition to Governmental Agencies' Efforts to Take Over Confidential Records or Data Pertaining to Tennessee Patients and Physicians

By: Reference Committee on Resolutions

Whereas, by tradition, custom and law, the confidences of patients to physicians has been a sacred trust, an inviolate confidence and not available for any purpose public, private, or personal, and

Whereas, governmental agencies have attempted in some instances to obtain confidential information concerning patients and physicians from sources including fiscal intermediaries, and

Whereas, the Tennessee Medical Association is opposed to such steps where records or data concerning patients or physicians are made available without the permission of the patient or physician; now therefore be it

RESOLVED, that the Tennessee Medical Association, through action of the House of Delegates, goes on record opposing any effort by all governmental agencies to obtain confidential records or data pertaining to Tennessee patients and physicians without their permission, and be it further

RESOLVED, that fiscal intermediaries in Tennessee be notified of this action and further that the fiscal intermediaries be urged to resist to the fullest extent any effort to obtain such data.

ACTION: **A MOTION FROM THE FLOOR AND APPROVED BY THE HOUSE OF DELEGATES REFERRED RESOLUTION NO. 6-69 AND SUBSTITUTE RESOLUTION NO. 6-69 TO THE BOARD OF TRUSTEES FOR FURTHER STUDY AND REPORT TO THE HOUSE OF DELEGATES.**

(A proposed Resolution No. 7-69 was withdrawn and not presented to the House of Delegates.)

RESOLUTION NO. 8-69

Proposed Continuing Medical Education Program

By: Committee on Continuing Medical Education

(Amendments recommended by the Reference Committee and approved by the

House of Delegates, deleted the word, "Mid-South," changed the word "Program" to "Programs," and the word, "has" to "have," in the Fourth Whereas; deleted the Third Resolve from the original resolution; and changed the wording of the Fourth Resolve. The Amendments, where possible, are shown in black-faced type.)

Whereas, the report of the President's Commission on Health Manpower emphasizes the importance of each physician working at his highest level of efficiency in order to partially alleviate the current shortage of physicians, and recommends "that professional societies and state governments should explore the possibility of periodic relicensing of physicians—", and

Whereas, the American Medical Association's Committee on Continuing Education, in seeking to avoid periodic re-examination for relicensure, urges all state associations to become involved in continuing medical education, each in its own way, after overall study of the problem, and

Whereas, the Tennessee Medical Association's Board of Trustees, anticipating eventual requirements for recertification, has established a committee for the purpose of developing a program of continuing education for its members, and

Whereas, the Regional Medical **Programs have** an obligation to further continuing education; now therefore be it

RESOLVED, that it is the conviction of the Committee on Continuing Medical Education that continuing self-education is imperative in the promulgation of good medical practice, and be it further

RESOLVED, that this Committee, believing that motivation is basic to self-education, recommends that the Board of Trustees and House of Delegates urge each member of the Tennessee Medical Association to become active in continuing education and self-examination, and be it further

RESOLVED, that in the development of such a program this committee will have as its function to act as a liaison and catalyst **to local medical societies and** the medical staffs of community hospitals. **The Committee will seek the cooperation of the Regional Medical Programs to assist them in the promotion of the continuing education program.**

The Reference Committee on Resolutions recommended adoption of Resolution No. 8-69 as amended.

ACTION: **ADOPTED AS AMENDED**

RESOLUTION NO. 9-69

Physician Participation in Hospital Policy Determination

By: Committee on Hospitals
A. Roy Tyrer, Jr., M.D., Chairman

(Amendments recommended by the Reference Committee and approved by the House of Delegates, inserted the words, "by action of the American Medical Association House of Delegates," following the word "urged" in the Second Whereas; deleted the Third Whereas in the original resolution; and changed the wording of the Second Resolve. The amendments, where possible, are shown in black-faced type.)

Whereas, physician participation in hospital policy determination continues to be a subject of national concern to the medical profession, and

Whereas, the Joint Commission on Accreditation of Hospitals has been urged **by action of the American Medical Association's House of Delegates** to consider this in their review and accreditation of hospitals, and

Whereas, the Tennessee Hospital Association has given this subject their serious consideration and has developed a well-conceived and responsive position paper on the subject; now therefore be it

RESOLVED, that the Tennessee Medical Association acknowledge this responsive expression on the part of the Tennessee Hospital Association, and be it further

RESOLVED, that the Tennessee Medical Association reaffirm its previously expressed interest and **recommendation that doctors of medicine be included on hospital boards**, and be it further

RESOLVED, that all physicians in Tennessee give this matter their personal consideration as it relates to the hospitals in their own communities.

The Reference Committee recommended adoption of Resolution No. 9-69 as amended.

ACTION: **ADOPTED AS AMENDED**

RESOLUTION NO. 10-69

Accreditation of Small Hospitals

By: Committee on Hospitals
A. Roy Tyrer, Jr., M.D., Chairman

Whereas, quality medical care is the goal of the medical profession, and

Whereas, meeting the standards of hospital accreditation as determined by the Joint Commission on Accreditation of Hospitals is a guide-post toward assuring quality medical care, and

Whereas, recent policy change on the part of the Joint Commission on Accreditation of Hospitals now provides for accreditation of hospitals with a 5 to 25-bed capacity, not previously included; therefore be it

RESOLVED, that all hospitals in Tennessee with five or more beds be urged to seek JCAH accreditation, and be it further

RESOLVED, that all physicians in Tennessee seek implementation of this Resolution in their community.

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The Reference Committee on Resolutions recommended adoption of Resolution No. 10-69.

ACTION: **ADOPTED**

RESOLUTION NO. 11-69

Additional Members on Board of Trustees

By: Chattanooga & Hamilton County Medical Society

(Amendments are shown in black-faced type.)

Whereas, the Board of Trustees of the Tennessee Medical Association is now composed of two elected members from each grand division for a total of six elected members in addition to the officers of the Tennessee Medical Association, and

Whereas, the Tennessee Medical Association in the past ten years has increased in size from approximately 2400 to 3400 members, and

Whereas, **despite** this increased membership there are areas of the state having major urban and rural physicians that are seldom represented on the Board of Trustees; therefore be it

RESOLVED, that the House of Delegates of the Tennessee Medical Association take under consideration and study the feasibility of electing one additional trustee to the Board of Trustees from each grand division to serve for a term of three years, and be it further

RESOLVED, that the new trustees be appointed on a staggered basis so that reappointment will not fall due in the same year in the future, **and be it further**

RESOLVED, that a committee to study the feasibility of this proposal be composed of five members of the present House of Delegates to be appointed before adjournment of this meeting of the House of Delegates, and that their report be submitted to the next regular session of the House of Delegates, and further that each grand division of the state be represented on the committee.

The Reference Committee on Resolutions recommended adoption of Resolution No. 11-69 and referral for consideration and recommendation by a House of Delegates' Study Committee, to be appointed by the Speaker.

Amendments from the floor added the third resolve and substituted the word, "despite" for the words, "in spite of" in the third whereas.

ACTION: **ADOPTED AS AMENDED**

Prior to adjournment of the second session of the House of Delegates, the Speaker appointed the following personnel to compose the Special Study Committee on Resolution No. 11-69; Dr. J. Malcolm Aste, Memphis, Chairman; Dr. Jos. L. Willoughby, Franklin; Dr. Charles A. Trahern, Clarksville; Dr. David P. McCallie, Chattanooga; and Dr. Gilbert A. Rannick, Johnson City.

RESOLUTION NO. 12-69

Medical Education

By: Board of Trustees

(An amendment recommended by the Reference Committee and approved by the House of Delegates deleted the words, "or social" following the word, "financial" and preceding the word, "reasons" in the third resolve.)

Whereas, the health care of the people of Tennessee is the prime responsibility of Tennessee Medical Association, and

Whereas, provision of good care to the entire population depends on an adequate supply of competent physicians, and

Whereas, this State is fortunate in having three first-rate medical schools within its borders; now therefore be it

RESOLVED, that the Tennessee Medical Association in its House of Delegates assembled, commends University of Tennessee, Meharry, and Vanderbilt on the quality of medical education in Tennessee, and be it further

RESOLVED, that in view of the continuing shortage of physicians, the medical colleges should continually evaluate admission criteria and curriculum standards to the end that the highest possible number of students selected for admission graduate at the proper time, and be it further

RESOLVED, that the Tennessee Medical Association through its liaison committee to medical colleges, student loan funds, and Board of Trustees stands ready to assist any student who for financial reasons finds continuation of his medical education in jeopardy.

The Reference Committee recommended adoption of Resolution No. 12-69 as amended.

ACTION: **ADOPTED AS AMENDED**

(Resolution No. 13-69 was withdrawn and not introduced in the House of Delegates in lieu of Resolution No. 15-69 on the same subject.)

RESOLUTION NO. 14-69

Change in Parliamentary Procedure Guide

By: Speaker, House of Delegates

Whereas, new concepts of parliamentary procedure have developed in recent years with the advent of the Reference Committee system, and

Whereas, **Robert's Rules of Order** does not

provide guidelines for situations arising from the Reference Committee System, and

Whereas, **Sturgis' Standard Code of Parliamentary Procedure** does provide guidance under these particular parliamentary situations, and in addition serves to amplify and modify **Robert's Rules of Order** in a constructive manner; now therefore be it

RESOLVED, that Chapter XI of the By-Laws of the Tennessee Medical Association be amended by striking the words, "governed by parliamentary usage as contained in **Robert's Rules of Order,**" and substituting therefor the words, "guided by parliamentary usage as contained in **Sturgis' Standard Code of Parliamentary Procedure.**"

The Reference Committee on Resolutions recommended adoption of Resolution No. 14-69.

ACTION: **ADOPTED**

RESOLUTION NO. 15-69

Solicitation and Commercial Advertising of a Medical Specialty by Lay Corporations in American Medical Association Publications

By: Memphis and Shelby County Delegation

(Amendments from the floor and an amendment recommended by the Reference Committee were approved by the House of Delegates. The amendments, where possible, are shown in black-faced type.)

Whereas, all American Medical Association publications were opened last fall to solicitation and commercial advertising of a medical specialty (pathology) by lay corporations, and

Whereas, physicians, by long tradition, are forbidden any activities characterized by self-laudation and solicitation, both of which are essential to commercial advertising, and

Whereas, this policy encourages the practice of medicine by lay corporations, and promotes solicitation, in violation of all codes of medical ethics, and

Whereas, this policy, adopted without consulting the House of Delegates, will set a precedent for regional, state and other medical journals, will spread to other fields of medicine and will lower standards of patient care; now therefore be it

RESOLVED, **that the Tennessee Medical Association** reaffirms medicine's traditional opposition to the practice of medicine by lay corporations, and to solicitation, and to commercial advertising of the practice of medicine, and be it further

RESOLVED, that the Tennessee Medical Association delegates to the American Medical Association House present a resolution during the July 13-17, 1969 annual meeting in New York calling for the American Medical Association Board of Trustees to reconsider their action and rescind the policy recently adopted regarding this matter.

The Reference Committee on Resolutions recommended adoption of Resolution No. 15-69 as amended.

ACTION: **ADOPTED AS AMENDED**

THE REFERENCE COMMITTEE on Resolutions concluded its report with the recommendation that where abbreviations such as, "AMA, TMA, JCAH, etc", occur in the resolutions, that these abbreviations be deleted and the full name of these organizations be inserted. It was further recommended that persons preparing resolutions in the future refrain from using abbreviations in the text of the resolutions.

RESOLUTION NO. 16-69

Independent Billing by Pathologists and Radiologists

By: Northwest Tennessee Academy of Medicine

Whereas, published policy of the American Medical Association, the Tennessee Medical Association, the American Society of Radiology and the American Society of Pathology indicated the need for practitioners of the specialties of radiology and pathology to move into a traditional relationship with their patients by billing the patient directly for services rendered, and

Whereas, after some years of effort on the part of the Council of the Tennessee Medical Association to implement this policy of private billing among practicing radiologists and pathologists in Tennessee, only 60% are at present in compliance with this policy; now therefore be it

RESOLVED, that the Tennessee Medical Association express its appreciation to those pathologists and radiologists in the state who have followed the stated policy of the American Medical Association, the Tennessee Medical Association, the American Society of Radiology and the American Society of Pathology with regard to the independent billing of their patients and that the Tennessee Medical Association anxiously awaits the compliance of all radiologists and pathologists in Tennessee with this policy, and be it further

RESOLVED, that a copy of this action by the House of Delegates of the Tennessee Medical Association be mailed individually to all the practitioners of radiology and pathology in Tennessee.

Resolution No. 16-69 was the last item of business presented in the Second Session of the House of Delegates. Since the Resolution actually reaffirmed previous actions of the House of Delegates, a motion was made, seconded and adopted that the House adjourn to a Committee of the Whole for discussion of the Resolution.

Following discussion, the Committee of the Whole recommended to the House of

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Delegates that Resolution No. 16-69 be adopted.

ACTION: **ADOPTED**

REPORT OF OFFICERS

Report of the President

EDWARD T. NEWELL, JR., M.D.

"As others before me have done, I want to express my thanks to the House of Delegates for giving me the high honor of serving as your 80th President. To have served as President of the Tennessee Medical Association is the highest honor of my medical career. I also would like and be remiss if I did not again express my thanks to the Chattanooga-Hamilton County Medical Society for submitting my name in nomination to this House.

"To the many physicians who devoted their time to the work of our Association, much credit is due. With few exceptions, every TMA member readily accepted appointments to committees, councils, and special assignments when asked. These men devoted untold hours developing their activities and programs so that our Association can achieve its purpose as defined in our Constitution and By-Laws. To these physicians, I express my thanks. Particular credit should go to members of the Board of Trustees. This is a hard working and dedicated group of doctors.

"Throughout the year the Board and the Committees have developed many ideas for the improvement of our Association's operation. One of the most impressive things that a President of an Association of this size and scope realizes is the complexity of the operations with which we are involved.

"The role and relationship of medicine with the public, with the State and Federal Government, with the allied professions, and within its own ranks becomes almost daily more complex and more demanding of specific answers and specific statements of intent for questions that did not even arise a few years ago.

"If there is a single word that characterizes American Society, that word is change. Today with the tremendous increase in population, 10% of the population produce enough agricultural products not only to feed our nation, but to send food to many areas of the world. The great technological advances have had a profound effect upon the farmer and his life. Likewise changes in the city and urban community have also been as drastic due to the technical advances of industry. For most Americans, it has paid off handsomely with more comforts of life and more leisure time.

"The changing times are just as significant in medicine. But are we as knowledgeable and informed in these matters as we should be? We must learn to provide leadership and cooperate with our government officials and legislators. We must become friendly with those involved with the labor movement, farm, insurance, and industrial people. For these changing times, more of our physician members must recognize that there is no such thing as 'status quo' in medical practice. I am sure that the premise with which we can begin is that, in this changing social order in which we are now embroiled, the definition of adequate health care has changed considerably.

"Adequate health care for all of our citizens has been moved from the realm of a debatable social issue to a position of public policy. Medicare has come to stay and any further discussion in this regard will probably be limited to correcting the obvious operational problems and expanding its scope to include certain additional groups. Government is now in the business of providing for medical care to a sizeable segment of the Country's population and, because of this, government has a direct interest in health care costs.

"Most areas of our medical economy—the commercial insurance industry, the Blue Plans, and the Hospital Association—know that they are in a time of transition; that we are living in an age of shifting social, economic, and political realities which envelop all who are concerned with health care be they providers, consumers, or insurors.

"Doctors have, for the most part, been too busy in their everyday practice to stop even long enough to be aware of these impending changes, much less to become knowledgeable and participate in the solutions to the problems we face. Most often the profession is engaged in an action to secure or try to retrieve what we think is ours. We should be attempting to keep alive the basic ideal of private enterprise as related to our changing times rather than to surrender to a regulated welfare state.

"How can we participate? Somehow, you Delegates, as well as we Officers, must get this desire to participate across to the local physicians which we represent. Besides the many local medical society committees and TMA committees, there are literally hundreds of health related committees, local, regional, and state, in which we need knowledgeable physician representation.

"In the future, we must be part of the planners, the surveyors and the initiators. I am sure that all of the physician members in our Association realize that the poor and unfortunate, and the ill in our Society must be aided, and in accordance with the American traditions generously so. Both by private and public means. And, in doing so, we believe that there is no need to force the entire population of our Country into an ever expanding web of compulsory welfare programs for everyone.

"The choice open today to the medical profession is no longer whether there will be changes. The choice is only to decide whether we want to have a part in directing these changes and affecting them in ways that we, as doctors, consid-

er to be the best way to spend our tax dollar for the public good. If we guide and initiate, we do this not merely because government says so, but because we are members of a learned and sensitively human profession. I believe that the Tennessee Medical Association has the aggressive leadership necessary for this purpose."

The President outlined a number of noteworthy activities of the Association during the year and discussed federal programs, calling particular attention to the Comprehensive Health Planning and Public Health Services Act (P.L. 89-749) and the Partnership for Health Amendments (P.L. 90-174). He emphasized the necessity of efforts by all physicians to become knowledgeable of the complex and involved program of comprehensive health planning and to guide its implementation for the betterment of the profession and the public.

It is necessary for the President to travel extensively to state, regional and national meetings, dealing with almost every facet of the practice of medicine and its relationship to the government and to related fields of health care. In serving as TMA's representative in these meetings, Dr. Newell stated that he had tried always to keep in mind what he believed to be the desire of the majority of the physicians of Tennessee in their relationship with the public, and had attempted to convey the experiences of these meetings to the membership through the President's message in the JOURNAL, in the meetings of the Trustees, the Leadership Conference and personal contacts.

In concluding his report, Dr. Newell expressed appreciation to the headquarters staff for their cooperation and stated, "this has been an interesting and busy year for me. It has been my privilege to serve as the 80th President of this great Medical Association."

THE REFERENCE COMMITTEE on Reports of Officers, Tinnin Martin, M.D., Chairman, commented on the report: "The President's report portraying the year's activities of a dedicated man and physician to which we of TMA have become so accustomed. It was another year in which the ever expanding activities of TMA were executed brilliantly by a talented and industrious leader. He typifies the theme of this report, that is, 'to lead and not to be led'."

THE HOUSE accepted the report.

Report of the Secretary

JAS. N. THOMASSON, M.D.

As a Constitutional Officer, the Secretary served as a member of the Board of Trustees and participated in the deliberations and decisions of the Board in administering the business of the Association. In addition, he represented the Tennessee Medical Association in liaison with other organizations when required.

Since many of the duties and responsibilities of the Secretary are administered by the Executive Director and the headquarters staff, a detailed report was not presented. In his report the Secretary commented: "I have been impressed by the dedication, knowledge, good judgment and common sense that the Officers, Trustees and Committee Members have exercised in administering the business of this Association."

THE REFERENCE COMMITTEE on Reports of Officers, Tinnin Martin, M.D., Chairman, commended the Secretary for his conscientious fulfillment of the duties of his office.

THE HOUSE accepted the report.

Report of the Board of Trustees

O. M. MCCALLUM, M.D.
Chairman

The Chairman prefaced his report with a list of the primary management responsibilities of the Board of Trustees and commented: "Four years ago, I met with ten of my colleagues for a session of the Board of Trustees of the Tennessee Medical Association. Prior to that time, I had served on several committees and as Councilor for the Eighth District. No, I did not presume to be knowledgeable of all of our problems, nor did I expect it to be an easy assignment; but I must admit that in a very short time, I became intensely aware of the full meaning of these duties and responsibilities. In that meeting, I was impressed with the sincerity and concern of the Board members and their responsible decisions in matters of importance to all of medicine in Tennessee. My tenure as a Trustee ends at the close of this session of the House of Delegates, and I leave this Office with the sincere belief that your Board of Trustees has made every effort to fulfill its obligations to the physicians of the state."

The four regular meetings of the Board were held in April, July and October of 1968 and in January, 1969. In addition to

the regular sessions, there were numerous occasions where matters requiring immediate attention were handled through correspondence or telephone conferences. The Committees of the Board met regularly and diligently performed the duties assigned to them. The report summarized the actions and decisions of the Board during the year:

—Appointed the personnel of all standing and special committees and received quarterly reports from the Coordinators on the activities of the committees within their Division. . . . In April 1968, a Committee on Comprehensive Health Planning and a Committee on Continuing Medical Education were established.

—Directed the Committee on Planning and Development to consider the activities, duties and composition of all of the committees and present its recommendation to the Board.

—Appointed members of the Board of Directors of IMPACT. . . . Recommended appointments to the Board of Directors of the TMA Student Education Fund. . . . Selected delegates from the three grand divisions of the State to compose the 1969 Nominating Committee.

—Recommended two representatives and two alternates for appointment to the Tennessee Interagency Council on Smoking and Health as directed by the 1968 House of Delegates. . . . Submitted nominees for appointment to a Medical Care Advisory Committee which will assist the State Agency in developing and administering the Medicaid program. . . . Selected representatives to attend the Regional Conference on Health Care Cost, conducted in Atlanta by HEW in October. . . . Appointed two representatives to attend the Congress on Socio-Economics of Health Care, held March 28-29 in Chicago. . . . Appointed a TMA liaison representative to the Long Term Care Advisory Committee of the Tennessee Hospital Association. . . . Recommended to the Governor, appointees for the Advisory Committee on Emergency Medical Services. . . . Appointed a delegate and alternate delegate from TMA to the Tennessee Council on Aging.

—Carefully evaluated the financial status of the Association. . . . Considered quarterly financial statements, as well as the yearly audit. . . . Considered and approved the budget for the operation of the Association. . . . Approved an additional $1,000 for the IMPACT Workshop in 1968. . . . Allocated $500 per year to the Woman's Auxiliary to help defray their administrative expenses. . . . Approved reimbursement of expenses of AMA alternate delegates to attend AMA meetings in 1969. . . . Approved an increase from $5 to $9 for a subscription to the Journal of TMA.

—Carried out the visitation program by Officers and Trustees with the County Medical Societies during the year.

—Considered matters referred to the Board of Trustees by the 1968 House of Delegates:

(1) Approved revisions recommended by the Interprofessional Liaison Committee and the Liaison Committee of the Bar Association and adopted the Code of Cooperation between the Tennessee Bar Association and the Tennessee Medical Association.

(2) Referred the guidelines for the care of medicare patients to the Utilization Committee for reconsideration. The guidelines were contained in the 1968 report of the Utilization Review Committee and approved by the House of Delegates with the proviso that they be considered temporary policy of the Association for one year only and subject to review by the appropriate Committee designated by the Board of Trustees. Revisions proposed by the Committee were approved by the Board and the Committee was authorized to furnish a copy to the fiscal intermediary for Medicare. It was the opinion of the Board however, that the guidelines should be utilized by the Committee and the intermediary, but should not be adopted as policy by the TMA.

(3) Appointed a special committee to study Resolution No. 10, adopted by the House of Delegates in 1968, directing that the Board of Trustees consider financial assistance, guidance, and stimulation from the TMA and the County Medical Societies to the Student American Medical Association Chapters in Tennessee as these needs develop; and further that the officers of the chapters be invited to attend future meetings of the House of Delegates.

Following a report from the Committee, the Board determined: (a) that there is concern for the SAMA Chapters; (b) that they should receive aid but that it may not necessarily be of a financial nature; (c) that this aid should come from the local areas, particularly where liaison between the students and the private practitioners may be established and enhanced and in this manner, further their education on a more conservative level; and (d) that the President of SAMA Chapters in Tennessee should be invited to attend the sessions of the house of Delegates in 1969 with their expenses to be paid by TMA.

—Considered and recommended for presentation to the House of Delegates, resolutions establishing policies and program for the Association, a change in the format of the sessions of the House of Delegates, and an increase in TMA membership dues.

—Approved recommendations of the Legislative Committee: (a) that the expenditure of funds be authorized to host dinner meetings for the legislators and contact doctors over the state; (b) that additional legal assistance be retained in 1969 to assist in legislative efforts if deemed necessary; (c) that TMA continue to co-sponsor with the Tennessee Hospital Association, the first aid station at the State Capitol during the General Assembly.

—Worked closely with the Committee on Governmental Medical Services to assure that one fiscal intermediary would handle all payments to physicians under state and federal funded programs; and with the Legislative Committee on the pending Medicaid bill as well as other legislation affecting the practice of medicine and the health care of the public.

—Discussed problems involved in accreditation of some of the smaller hospitals for care of Medicare patients, and directed the Committee on Governmental Medical Services to pursue the matter and to request the assistance of the Hospital Association in seeking a solution to the problem.

—Considered four items presented by the Tennessee Mid-South Regional Medical Program, and (1) Referred to the Committee on Regional Medical Programs, a motion before the Regional Advisory Group . . . "that the TMA be requested to appoint a committee to investigate the economic and medical legal aspects of the increasing use of telephone consultations between private physicians and members of medical school faculties, and after consultation with interested individuals, report their recommendations regarding these relationships to the Advisory Group."

(2) Recommended six physicians for appointment to a permanent Study Group for Education, Research, and Communication. (3) Authorized the RMP Committee to determine approval or disapproval of a Regional Biomedical Library Program. (4) Referred a request for approval in principle of the RMP proceeding to develop plans for a statewide cancer registry to the TMA Committee on Cancer.

In concluding his report, the Chairman expressed appreciation to the members of the Board and the TMA staff for their attendance, cooperation, diligence and outstanding performance during the year.

THE REFERENCE COMMITTEE on Reports of Officers, Tinnin Martin, M.D., Chairman, commented: "It is obvious from the Chairman's report that the Board of Trustees has been active and many hours of work have been spent in the day to day management of TMA. The report clearly outlines the responsibilities of the Board and then in detail presents the actions for the past year. The Reference Committee recommends that every delegate closely read this report which truly is a resume, not only of what has been done in TMA but of TMA's policies and problems relative to governmental medicine, legislation, administration, etc."

THE HOUSE accepted the report.

Report of the Treasurer

ROBERT L. CHALFANT, M.D.

Control of TMA's financial operations as well as the studied needs of future requirements is the responsibility of the Board of Trustees, with the advice of the Board's Finance Committee. It is the responsibility of the Trustees to determine as accurately as possible the immediate as well as the long-range financial requirements of the Association. TMA operates its fiscal affairs on the budget method. The budget is developed and adopted in the October meeting and becomes effective on the first day of the following calendar year.

The Treasurer reported that with some cutback and diligent management in 1968, TMA operated within the budget and realized an excess that helped to restore a deficit incurred in the two preceding years. However, the requirements of the budget increase approximately 4% each year. The

TENNESSEE MEDICAL ASSOCIATION
Nashville, Tennessee

OPERATING STATEMENT
Year Ended December 31, 1968

(Consolidated Financial Statement—January 1-December 31, 1968)

INCOME

	1968	1967
Exhibits and Annual Meeting	$ 10,204.50	$ 9,409.00
TMA Dues	165,852.50	162,215.00
Journal Advertising	38,697.97	41,774.99
Investment Income	10,487.83	10,152.17
Miscellaneous and Other Income	5,502.70	4,824.44
TOTAL	$230,745.50	$228,375.60

DISBURSEMENTS

	1968	1967
Administrative	$ 11,059.27	$ 9,552.46
AMA Delegates and Hospitality	7,970.10	4,836.89
Annual Meeting—TMA	11,777.64	14,492.92
Attorney and Auditing	9,324.85	6,434.00
Board of Trustees—Committees—Council	4,361.16	7,290.55
Headquarters Building	5,163.48	4,752.43
IMPACT	4,000.00	3,000.00
Journal—TMA	42,992.41	43,831.34
Legislative Expense	7,662.01	11,521.15
Public Service	1,213.93	3,261.23
Staff Salaries & Employee Insurance	71,631.11	69,418.33
Taxes	2,627.14	2,019.69
Staff Travel	6,564.87	5,591.86
Building Fund	5,000.00	5,000.00
State and County Officers Conference	1,032.49	—
Purchase of Property	—	45,365.49
Miscellaneous and Other Expenses	5,757.35	5,994.52
TOTAL	$198,137.81	$242,362.86

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TENNESSEE MEDICAL ASSOCIATION

BALANCE SHEET

December 31, 1968

	December 31	
ASSETS	**1968**	**1967**
Operating Fund—		
General Business	$ 64,544.64	$ 60,739.49
Reserve Fund: (Savings,		
Investments, Bonds)	249,960.60	220,938.63
Student Education Fund—		
Cash	17,607.43	15,895.24
(Notes Due)	36,785.00	37,650.00
Memorial Trust Fund	1,698.02	1,622.13
Building Fund	10,369.99	5,000.00
Property Fund—Fixed		
Assets) (Land, Building,		
Equipment—Less		
Depreciation)	114,331.97	114,978.65
LIABILITIES		
Accounts Payable	$ 228.32	$ 228.32
Accrued Payroll Taxes	1,452.78	1,233.35

budget for the fiscal year 1969, is $226,330.00. This is slightly in excess of anticipated income from all sources.

The examination of the Association's accounts as of December 31, 1968, was made by Ezra Jones Company, certified public accountants of Nashville. The following consolidated financial operating statement for 1968, and a balance sheet of the financial status of the Association were included and a part of the Treasurer's report.

"The Board of Trustees welcomes the opportunity to present an accounting of its stewardship on the financial affairs of the Tennessee Medical Association. The Trustees are apprised quarterly of the income and expense status of our fiscal transactions and a monthly summary of income and expenditures is carefully considered by your Treasurer."

THE REFERENCE COMMITTEE on Reports of Officers, Tinnin Martin, M.D., Chairman, recommended acceptance of the report as submitted.

THE HOUSE accepted the report.

Report of the Council

B. G. Mitchell, M.D., Chairman

Immediately following the last meeting of the House of Delegates in 1968 the Council met for organizational purposes and to discuss any troublesome phases of physicians and the corporate practice of medicine in the state. It was the conclusion of the Council members that approximately 60% of the radiologists and pathologists of the state were complying, in every respect, to their speciality societies and the Tennessee Medical Association.

This lingering problem continued to receive the attention and surveillance of the Council in 1968. Though the Council has not received from the resolutions of the TMA a precise method of compliance which would allow them to sit in judgment, it has continued to encourage and advise members as to the necessity of separation of their professional services from the technical operations of the hospital departments. It is the opinion of the Council that corporate practice of medicine is as much a problem of the respective specialty societies as it is for the TMA Council . . . and further that the determination of that which constitutes compliance should probably be the function of these specialty societies with the Council serving in a protective capacity for the physician and the Association.

The Chairman also discussed the controversial problem of over-utilization of medical services, and stated: "We, of this Association, must continue to exert rigid self-discipline in utilization and, in addition, we must be certan that the integrity and character of most physicians is not being maligned by a few. We must develop methods of detection of any over-zealous physician before his activities can lead to irreparable damage to himself and to us. The Council of this Association must act in this capacity. The Council can only act with the cooperation of each constituent Medical Society and in fact, with the cooperation of each individual member."

The annual reports of the County Medical Societies to the Council revealed that the overall standard of ethics in Tennessee remain quite high and speaks well for continued harmony between patients and physicians. "With ethics and conduct at such a high level by physicians of our Association one must seriously question the motives of those rendering such scandalous attacks on physicians generally."

THE REFERENCE COMMITTEE on Reports of Officers, Tinnin Martin, M.D., Chairman, commented: "It would appear from this report that the overall standard of ethics in Tennessee remain quite high but that we must be ever vigilant

in order to maintain these high standards of ethics. It is recommended that the report of the Council be accepted."

THE HOUSE accepted the report.

Report of the Executive Director

J. E. Ballentine

The report of the Executive Director consisted of a review of the major activities of the Tennessee Medical Association and the staff for the past year. As an Association, the TMA reflects the desire of physicians to join together for the maintenance of their honor and respectability, for advancement of their knowledge and the extension of their usefulness.

The growing complexity in the management of the Association's affairs necessitates continuing study and action. The Executive Director is primarily concerned with three broad areas of responsibility. These are: (1) to coordinate and administer the affairs of the Association with the assistance of the administrative staff; (2) to provide leadership and support to the Officers, members of the Board of Trustees, assistance to the House of Delegates, the Committees and Council, and to insure effective policy and program development, and (3) to represent the Association to its county medical societies, the public, governmental agencies and to health related organizations, and others.

The major administrative work evolves around the staffing of more than 40 committees and implementing their activities; continuing responsibilities with the monthly publication of the Journal; research; financial management; the keeping of records, books and proceedings of meetings; the maintaining of close contact with our members through the travels of the field liaison staff; the publication of "The TMA Transmitter" newsletter, direct mailings, a deluge of daily telephone calls and of the unlimited amount of correspondence received, are part of the administrative load. The continuous work required in legislative planning climaxed in a legislative year such as 1969, and the daily growth of duties associated with the governmental medical programs demand practically seven days a week of the Executive Director and staff's time. A sampling of TMA's activities and projects are in the field of public service, economics and insurance, health care cost, hospital problems, corporate practice, legislation, ethics, nursing, governmental health programs, both on the national and state level. One of the major activities is that requiring planning and conducting the annual session of the House of Delegates and the annual meeting of the Tenessee Medical Association each year. TMA is now the 17th largest state medical association among the 54 state and territorial medical associations.

The report pointed out that the growing demands upon the Association will require in future years additional staff and expenditures. The report stated that TMA must retain competent staff personnel with experience, rather than losing staff personnel to other jobs with higher remuneration. The report also revealed that TMA membership as of January 1, 1969 totaled 3319 members.

The Executive Director's report outlined 17 major activities in which the Association, the Executive Director and staff have been involved during the past year. These activities covered a wide ranging group including committee activity, working with the intermediary for Medicare, travel to out of state meetings and visits with county medical societies, contact with state officials and legislators, close liaison with the Tennessee Hospital Association, Nurses Association and the news media.

The report called to the attention of the House of Delegates the fact that the headquarters building in Nashville is used to capacity and it is imperative that the expansion of the building on the property purchased previously, should get underway as soon as fiscally feasible in order to provide the facilities needed to conduct the work of the Association.

The Executive director's report was divided into the following major classifications of activities for review. These were: Introduction, the Role of the Executive Director and staff, Administration, Implementation, Communications and visitation, Financial Management, Journal production, Membership, Major activities, Personnel and Planning.

The report concluded with an expression of gratitude to the Officers, Committee Chairmen and members of the Board of Trustees, the Councilors and to physicians

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throughout the state for their assistance, advice and cooperation.

The Executive Director commended to the members of the House his confidence in and gratitude to a loyal, efficient and dedicated headquarters staff.

THE REFERENCE COMMITTEE on Reports of Officers, Tinnin Martin, M.D., Chairman, commented: "The report of the Executive Director gives an excellent account of activities of the administrative staff of TMA headquarters and outlines the efficient manner in which these activities have been carried out."

THE HOUSE accepted the report.

REPORTS OF STANDING COMMITTEES

Report of Committee on Scientific Work

CHARLES B. MCCALL, M.D., Chairman

"The primary result of the two meetings of this Committee—first alone and secondly with representatives of the specialty societies—is the current scientific annual meeting for 1969 here in Gatlinburg.

"The other primary area of attention by the Committee concerns recognition of the importance and contribution to the TMA of all specialty groups, but also stressing the primary importance of many of todays issues in medicine important to all physicians requiring good communication, close cooperation, and information that results from joint meetings. To this end, the Program Committee requested that all specialty societies discuss a cooperative type of presentation such as two large general meetings to run two days during the annual meeting with one program being primarily surgical specialty groups and the other meeting primarily medical specialty groups. The results of this discussion in the specialty groups is to be reported to the TMA Committee on Scientific Work in 1969."

THE REFERENCE COMMITTEE on Reports of Standing Committees, Louis Rosenfeld, M.D., Chairman, recommended acceptance of the report as submitted.

THE HOUSE accepted the report.

Report of the Editor

R. H. KAMPMEIER, M.D.

"Volume 61 of the Journal (1968) consisted of a total of 1,263 pages, which is smaller by about 100 pages than Volume 60. (This is a reflection of a decrease in advertising.) The ratio of advertising pages to those of text has remained at about the usual 60:40 percent respectively. The decrease in budgeting for advertising in medical journals has been quite general in the pharmaceutical industry, as the result of a changing pattern in its approach to 'advertising,' to which some of the regulatory actions of the FDA have contributed.

"We have attempted in the Section on *Viewing Box* to present contemporary thinking on socio-economic problems as expressed editorially or otherwise in other state journals. This method has been used to amplify the published materials which the Editor, the Executive Director and other members of the Staff believe essential as information to the members, again in the area of the social and economic aspects of medical practice. If the members would give attention to the President's Page, the yellow pages, and the editorial pages, they would keep abreast of matters of importance to 'organized medicine.' "

THE REFERENCE COMMITTEE on Reports of Standing Committees, Louis Rosenfeld, M.D., Chairman, recommended acceptance of the report as submitted.

THE HOUSE accepted the report.

Report of Committee on Hospitals

A. ROY TYRER, JR., M.D., Chairman

1968 was the third year that the Committee on Hospitals held regular quarterly meetings with the Tennessee Hospital Association. The Chairman reported that this regularly scheduled meeting arrangement had provided a forum for continuing discussion and dialogue that has been most helpful, and is in the broadest interest of both organizations. "It is both sane and sound, when one considers the inter-relationships that exist, as well as the inter-dependence, with respect to both programs and problems."

Increasing health costs, inadequate financial support for the care of the poor, and health manpower shortage, particularly in the realm of nursing, continue to provide the trouble spots, and were topics of discussion in the quarterly meetings.

In October, the first statewide seminar for hospital administrators, boards of trustees, and medical staff officers was held in Nash-

ville, co-sponsored by TMA and THA. Outstanding speakers of national reputation were present and the conference attendance was excellent, as was the program content. The conference provided a new avenue of liaison between the medical profession and others closely involved and concerned in health care problems. It is anticipated by the Committee that similar meetings may be developed in the future.

In the report of the Committee, the Chairman outlined some of the legislative efforts of the Tennessee Hospital Association which had been thoroughly discussed and reviewed and had received the support of TMA. He also called attention to two resolutions, introduced by the Hospital Committee for consideration by the House of Delegates: Resolution No. 9 on the subject of physician participation in hospital policy determination, and Resolution No. 10 on accreditation of small hospitals.

The Committee requested the Board of Trustees to give consideration to the following recommendation:

"It is the opinion of the Hospital Committee that the purposes of this Committee could better be accomplished by the establishment of three sub-committees within the framework of the overall Committee to deal with: (1) accreditation; (2) nursing and health manpower problems, and (3) hospital services. A sub-committee on Hospital Accreditation presently exists, with a geographic representation, the purpose of which has been to provide aid to hospitals seeking accreditation when such assistance is sought. It is felt that the activities of this sub-committee should be expanded and its relationship to the Hospital Committee more clearly established. Nursing problems have, in the past, been dealt with primarily by the Interprofessional Liaison Committee, but these and other health manpower problems are so much an integral part of day-to-day hospital operation that it is felt problems relating thereto might better fall within the province of the Hospital Committee. A proposed sub-committee on Hospital Services would consider such subjects as emergency room services, hospital costs, and related medical staff problems. The chairman of each sub-committee would be a member of the TMA-THA Liaison Committee."

THE REFERENCE COMMITTEE on Reports of Standing Committees, Louis Rosenfeld, M.D., Chairman, recommended acceptance of the report and referral of the recommendation to the Board of Trustees.

THE HOUSE accepted the report.

Report of the Liaison Committee to The Public Health Department

Wm. A. Hensley, M.D., Chairman

The Liaison Committee to the Department of Public Health met with the Public Health Council at its two semi-annual meetings. The first meeting was held on April 18, 1968 in Chattanooga, Tennessee, in conjunction with the TMA annual meeting, and the second on November 20, 1968 in Nashville. The Chairman reported on several actions of the Public Health Council of interest to members of the TMA:

1. The Council approved the use of x-ray films in Crippled Children's Service for teaching purposes on a statewide basis.

2. Laboratory regulations were discussed and the Council concluded with a motion that these regulations be adopted in toto with the understanding that any person who is presently working in a laboratory will be given the opportunity to select the test or tests for which he will be examined and licensed and that the examination will not be on subjects outside or beyond those selected by him.

3. The Crippled Children's Service submitted a suggested revision of the Recommended Income Scale for Determining Medical Indigency which would be in accord with the minimal income of $3,000 for a family of four, the level recommended by the federal government for care of the medically indigent. The Public Health Council approved this new income scale for determining medical indigency.

4. Following consideration of the regulations governing the prevention of phenylketonuria and other metabolic efects, the Council approved the Regulations Governing The Prevention of Phenylketonuria and Other Metabolic Defects.

5. Proposed changes in the Cancer Control Services Fee Schedule were discussed and the Council approved the recommended fee schedule for the Cancer Control Services that the service go to usual and customary fees with the proposed fee schedule to be used as maximum amounts.

6. Three legislative proposals presented by the Commissioner of Public Health were approved by the Council: (a) An act relating to the control, management and disposal of solid waste in Tennessee in cooperation with federal, state and local agencies responsible for the prevention, control, or abatement of air, water, and land pollution. (b) An act to amend the Tennessee Code Annotated relative to vital statistics and the State Department of Public Health. This bill would prohibit local Health Departments from issuing so-called copies of birth certificates. (c) An act relating to Nursing Homes and Nursing Home Administrators and calls for providing the licensing of nursing home administrators; to

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create the Tennessee State Board Examiners; requirements for licensure as a nursing home administrator; providing a fee for license; fixing its membership, and prescribing its powers, duties and functions; providing penalties for violation of the act; and to repeal conflicting laws.

7. Following a report by the Division of Air Pollution Control, the Council moved to request the Legislature to appropriate adequate funds for the Air Pollution Control Program or repeal the act.

In the November meeting, the laboratory licensing program was again discussed and it was pointed out that a committee headed by Dr. L. W. Diggs was willing to put time into this project and help to perfect an examination that would be more in line with the work that technicians actually perform. The Council recommended to the Commissioner of Public Health that the services of the Advisory Committee with regard to the laboratory licensing program be utilized.

First-Aid Stations at stadia, transportation terminals, etc. were discussed in both meetings, however no action was taken by the Council.

THE REFERENCE COMMITTEE on Reports of Standing Committees, Louis Rosenfeld, M.D., Chairman, recommended acceptance of the report as submitted.

THE HOUSE accepted the report.

Report of Committee on Legislation and Public Policy

O. Morse Kochtitzky, M.D., Chairman

"As everyone here is fully aware, the Tennessee General Assembly is now in the middle of their 86th session. After the required 15-day organizational meeting in early January, the Assembly reconvened February 25th. A resolution was immediately adopted which called for a 45 legislative day session and set adjournment for May 9th. The remaining 45 days available to this Assembly will be utilized next year with the session set to begin January 10, 1970.

"At the time this report was written (April 1st) there were several important pieces of health legislation pending in which TMA has a direct interest. Of particular interest to TMA are bills which would delay the implementation of Tennessee's Title XIX program and a proposal calling for an expansion of the Public Health Council with the addition of a layman 'learned in mental retardation.' TMA vigorously opposes both."

The Chairman reported that two important legislative proposals supported by TMA had been adopted by both the House and Senate: (1) A Uniform Anatomical Act establishing methods and procedures for persons to leave all or parts of their body to medical science upon death. (2) An act to allow persons under the age of 21 to seek and receive medical treatment from physicians for Veneral Diseases without parental consent. Legislation of this type was suggested by the AMA House of Delegates as a means of helping to curb the rising incidence of veneral disease which is plaguing our Nation. TMA sponsored this measure.

A multitude of other proposals had been brought before the General Assembly with which TMA expressed an interest. Areas of concern included strengthening the drug abuse laws, regulation of hospitals, improvements in the mental health statutes, workmen's compensation amendments, medical-legal proposals, laboratories and blood banks, insurance, and several other general areas of health legislation.

Again in 1969, TMA co-sponsored a Capitol First Aid Station with the Tennessee Hospital Association, and the Chairman commended the physicians who volunteered their services in this effort. He also expressed appreciation to the contact doctors across the state whose efforts had made the difference between winning and losing on several matters of concern; to the three TMA members who served in the House of Representatives; to Mr. Charles L. Cornelius, Jr., TMA's legal counselor, and to the TMA staff.

It was pointed out that the committee's concern with national legislation should not be over-looked, and that the Committee again planned to visit Washington D.C. and host a meeting with members of the Tennessee Congressional delegation. This annual affair offers an opportunity to apprise the Tennessee Delegation of Medicine's concern regarding health care legislation.

THE REFERENCE COMMITTEE on Reports of Standing Committees, Louis Rosenfeld, M.D., Chairman, recommended acceptance of the report as submitted.

THE HOUSE accepted the report.

Report of Committee on Insurance

Wm. T. Satterfield, M.D., Chairman

The following group insurance plans are sponsored by the Tennessee Medical Association: Disability; Life; Major Hospi-

tal—Extended Hospitalization; Professional Overhead; Accident and Dismemberment; Accounts Receivable; Retirement Accumulation; Professional Liability; "Umbrella" Liability.

"Umbrella" Liability—Blanket catastrophe coverage of all types of liability is recommended for physicians. This coverage is very popular. For a nominal premium, there is an addition of $1,000,000 or more to the insurance covering your professional practice, automobile, personal occurrences, coverage of "un-thought-of liabilities," in addition to major hospitalization coverage.

Professional Liability—The TMA group insures over one-half of its members. The group rates offer a savings of 20-30%. Premium rates in Tennessee and nationally have increased twice in the past year. TMA strongly protested recent raises of premiums. However, "bureau" rates were increased and liability judgments continued to rise. Your Committee believes that this trend will continue. Investigation is being made into a group coverage which will discount these premium raises by placing coverage other than professional liability with one carrier, who would be able to pass on savings generated by having auto and home owner insurance in one package. This appears to be the only way in which professional liability rates will be held down.

In summary: (1) TMA's group endeavors are functioning smoothly, due to efficient administrators. (2) TMA's group insurance dividends are returned in benefits to the policyholders. (3) Catastrophic liability coverage is recommended for physicians. (4) TMA members are encouraged to participate in the group coverage available as large participation assures more benefits.

THE REFERENCE COMMITTEE on Reports of Standing Committees, Louis Rosenfeld, M.D., Chairman, recommended acceptance of the report.

THE HOUSE accepted the report.

Report of the Committee on Cancer

B. F. Byrd, M.D., Chairman

The report of the Committee on Cancer outlined the following activities:

(1) The individual members of the Committee have participated in the founding of the regionalized cancer registry. This registry will hopefully become active in the Fall with the assistance of the Regional Medical Program and Vanderbilt University Hospital.

(2) TMA will conduct, in cooperation with the Tennessee Division of the American Cancer Society and the Tennessee Commission on Aging, a breast cancer detection program for the elderly.

(3) the Committee is actively involved with the TMA Committee on Medicine and Religion in physician-minister conferences on the psychological impact of cancer to be held in each region across the state.

(4) The present status of the cytology program in Memphis will be presented to the TMA membership in the June issue of the TMA Journal.

(5) The Committee on Cancer has requested TMA's endorsement of the American Cancer Society's program of rehabilitation aid by volunteers to attending surgeons and family physicians in help for cancer patients about to undergo colostomy, mastectomy or laryngectomy operations.

The Chairman expressed appreciation to the members of his committee for their cooperation in developing an effective cancer program for Tennessee and gave special recognition to Dr. C. B. Tucker, Head of the Division of Preventable Diseases for the Department of Public Health for the State of Tennessee.

THE REFERENCE COMMITTEE on Reports of Standing Committees, Louis Rosenfeld, M.D., Chairman, recommended acceptance of the report.

THE HOUSE accepted the report.

Report of Memoirs Committee

Henry L. Douglass, M.D., Chairman

The Memoirs Committee reported that 48 members of the Association died during the calendar year 1968 and in January and February of 1969. The names of the physicians were listed in the prepared report.

"The lives and achievements of our 48 deceased members are now a matter of history and history will judge them in the context of their times. Statistically their average age at death was only 66 years, the oldest 88, the youngest 33. Their overlapping careers in medicine covered 61 years of the 20th Century from 1907 when the oldest was licensed, to 1968 when the youngest died. In those years civilization was becoming segmented and badly out of balance. Although they included every field of medical practice and lived in every geographical area of the state. Actually they represented the medical profession in that period. Looking back, no one could have chosen so many, more worthy to do so or that could have done it better. Today we are deeply indebted to them, not alone for their dedicated services to the public but also for their interest

and active participation in the affairs of organized medicine."

THE HOUSE OF DELEGATES stood in silent tribute to their colleagues.

Report of Committee on Health Insurance

Wm. T. Satterfield, Sr., M.D., Chairman

Activities of the Health Insurance Committee were limited during the year. The recommendation of TMA and the Committee in the previous year, that Title XIX be implemented by the use of health insurance has been actively pushed by the Committee on Governmental Medical Services. Tennessee's administrator for Title XIX, the Department of Public Health, requested and received proposals from insurance carriers. Public Health had stated that the health insurance method was its choice over direct administration. The initial implementation of Title XIX in Tennessee will be limited to coverage of groups presently under Welfare (categorically needy).

Contacts had been made with the national Health Insurance Council (representing most of the health insurance carriers). Health insurance carriers were requested to suggest premium rates for truly comprehensive care, utilizing usual and customary physician fees. It was reported that there has been some apathy on the part of the carriers to develop these premium rates, and that this may be due, in part, to lack of knowledge as to what may be required in future governmental programs. There are efforts nationally to study costs and premium structures of health insurance comprehensive coverage.

Communications had been recived concerning the broadening of insurance payments for office and out-patient services. Commercial insurance carriers state that such benefits are available and that it is a matter of price. The trend is for groups to increase by contract such benefits from year to year.

THE REFERENCE COMMITTEE on Reports of Standing Committees, Louis Rosenfeld, M.D., Chairman, recommended acceptance of the report.

THE HOUSE accepted the report.

Report of Advisory Committee to the State Department of Public Welfare

Lamb B. Myhr, M.D., Chairman

"The Advisory Committee to the Tennessee Department of Public Welfare has concerned itself for the past several years with advising the Commissioner and his staff of the need for certain drugs to be included or omitted from the drug formulary utilized by the Department for recipients of certain programs.

"The Committee met with the Commissioner of Public Welfare on one occasion during 1968 to consider certain changes in the drug formulary. A total of 84 separate requests for drug additions to the formulary were discussed. The Committee recommended 12 new drugs to be added and also suggested that six additional drugs, useful in treating patients with mental disorders, be given consideration by the Department.

"The Commissioner was of the opinion that the implementation of the state's Medicaid program in mid-1969 would eliminate the necessity of future meetings of this type in view of the method expected to be utilized for the purpose of supplying necessary drugs to recipients. In view of this possibility, the TMA Advisory Committee to the Department of Public Welfare will, in all probability, be one of stand-by in the future."

THE REFERENCE COMMITTEE on Reports of Standing Committees, Louis Rosenfeld, M.D., Chairman, recommended acceptance of the report.

THE HOUSE accepted the report.

Report of Communications and Public Service Committee

O. M. McCallum, M.D., Chairman

The Committee had difficulty in getting a representative group of its members together during the year. On two separate occasions meetings were called and then cancelled. As a result, the composition of the Committee was thoroughly discussed at the January meeting of the Board of Trustees and the Board approved a recommendation that the Committee be recomposed of nine members, three from each grand division of the state. An amendment to the By-Laws to accomplish this had been presented to the House of Delegates.

As Chairman of the Committee, Dr. McCallum met with members of the headquarters staff to discuss several items pertaining to the operation of the Communica-

tions and Public Service Committee. Two tangible items received attention during the year.

(1) The annual observance of Community Health Week each October. This week-long observance provides an excellent opportunity for county medical societies to undertake a public service project with the least possible amount of time required. An excellent kit of materials is made available by AMA to each county society. This kit contains everything necessary to conduct the project and furnishes all the work except getting the material into the hands of the right news media representatives. County societies were urged to participate and take advantage of this opportunity to tell medicine's story to the public through cooperation of the local news media.

(2) The ever-increasing problem of drug abuse has been a topic of interest on both the state and national level. The AMA is currently in the process of implementing a national campaign to educate the public on the hazards of drug abuse; and the Chairman of the Public Service Committee had written to the President of each Chapter of the Woman's Auxiliary, calling attention to the problem and encouraging them to initiate projects on drug abuse for presentation before school, church and other interested groups and organizations.

The Committee has always endeavored to work with the Medical Assistants Society of Tennessee in any way possible. The Chairman emphasized the importance of this organization to physicians as well as their employees and recommended that members of the House of Delegates visit the exhibit booth of the Medical Assistants Society sometime during the meeting.

Operation of the Placement Service for physicians wanting to find a location to practice in Tennessee, a community seeking a physician, or a TMA member who wishes to relocate his practice, continues to be an important activity of the TMA Public Service Office.

"It is the Committee's hope that additional specific public service projects can be implemented during the coming year. Consideration will be given to reinstigating a successful project of recent years, the television series 'Spotlight on Medicine.' Should we be able to do this, I urge individual participation whenever possible."

THE REFERENCE COMMITTEE on Reports of Standing Committees, Louis Rosenfeld, M.D., Chairman, recommended acceptance of the report.

THE HOUSE accepted the report.

Report of Rural Health Committee

JULIAN C. LENTZ, M.D., Chairman

The foremost activity of the Rural Health Committee was to co-sponsor the annual Rural Health Conference with the Tennessee Farm Bureau Federation, and the University of Tennessee Agricultural Extension Service.

The Sixth Annual Rural Health Conference was held October 16, 1968 on the campus of Tennessee Technological University in Cookeville. A total of 157 persons registered for the meeting which was smaller than the conference in 1967, but actually larger than expected from this area. More physicians attended this meeting than any previous meeting. Others attending included home demonstration club members, county agents, extension service personnel, and farm bureau members.

The Chairman reported that the program was well received by those in attendance. He stated that it was his belief that the work of the Committee in conducting these annual Rural Health Conferences is fulfilling its constitutional obligation, which is "To Promote the Improvement of Health Standards in Rural Areas of Tennessee."

THE REFERENCE COMMITTEE on Reports of Standing Committees, Louis Rosenfeld, M.D., Chairman, recommended acceptance of the report.

THE HOUSE accepted the report.

Standing Committees Not Reporting

Two standing Committees of the Association, the Mediation Committee and the Committee on Tennessee Medical Foundation, did not submit reports to the House of Delegates in 1969.

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REPORTS OF SPECIAL COMMITTEES

Committee on Emergency Medical Services

C. Robert Clark, M.D., Chairman

The Committee on Emergency Medical Services met jointly with the Tennessee Section of the Trauma Committee of the American College of Surgeons to outline programs in the field of emergency medical services for the state in 1968-69. This is a cooperative effort to coordinate the programs of both committees.

In September, 1968, Governor Ellington appointed five physicians as members of the sixteen man Advisory Committee on Emergency Medical Services. This committee has met regularly and has supervised the completed study of Emergency Medical Services in Tennessee, done by the Bureau of Educational Research and Service, Department of Health and Education, University of Tennessee. This study included interviews utilized to assess the existence of facilities and personnel in the degree to which they adequately function in the following departments: (1) Hospital Emergency Department; (2) Emergency Transportation Services; (3) Governmental and Public Safety; (4) Physicians; (5) Law Enforcement; and (6) Industrial Medical Facilities.

The results of this survey were presented to the Governor and are to be the basis for legislative package presented by the Governor to the 1970 Legislature.

Activities planned by the Committee in 1969 include the implementation of the Highway Safety Act of 1966 and to continue to work with the Governor in the field of emergency medical services.

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "The subject of emergency medical services continues to be one commanding both state and national concern. Progress has been made this past year toward a better understanding of the existing conditions and related problems as they pertain to Tennessee. It is a subject that clearly needs continued study, as well as intelligent planning by the groups referred to in this report, working together in a close collaborative fashion. Acceptance of the report is recommended."

THE HOUSE accepted the report.

Report of Committee on Environmental and Occupational Health

James J. Lawson, M.D., Chairman

The following recommendations were contained in the report of the Committee in 1968:

(1) The Tennessee Medical Association, through its appropriate committees, develop publicity and educational programs for the general public in the areas of "Air and Water Pollution" and "Poison Control Centers."

(2) That this Committee and/or other appropriate committees undertake to develop detailed and authoritative information in the field of toxicology, household poisons and particularly insecticides for the use of county medical societies in dealing with the practical everyday problems of poisoning due to the many complex materials used in household cleaning, insecticides, etc.

The Chairman reported that it is planned by the Committee to further develop these proposals in 1969-70.

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "Much is still required in this general area which will necessitate the continued diligence of this Committee. It is felt that the good work already accomplished in setting up Poison Control Centers deserves further publicity, both to the profession and the laity. Acceptance of the report is recommended."

THE HOUSE accepted the report.

Report of the Advisory Committee to the Woman's Auxiliary

Jacob T. Bradsher, Jr., M.D., Chairman

"The Woman's Auxiliary, as is their characteristic, furnish much support to the Tennessee Medical Association and request little in return. Advice in regard to criteria for membership in the Auxiliary was sought and given. Under the capable leadership of Mrs. Betty Jenkins, the Auxiliary has been very active and accomplished much. The Advisory Committee, in behalf of the Tennessee Medical Association, congratulates and extends its thanks for the outstanding accomplishments of the Woman's Auxiliary."

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "Providing advice to the Woman's Auxiliary is probably presumptive and doubtfully indicated when one reviews the remarkable job they have done in obtaining support for the AMA-ERF. Nevertheless we stand ready to consult and advise with the Auxiliary on any occasion and welcome the opportunity. Acceptance of the report is recommended."

THE HOUSE accepted the report.

Report of Committee on Mental Health

Frank H. Luton, M.D., Chairman

The Committee's 1968 report included the following recommendations: (1) a hand-

book for physicians relating to the laws concerning the procedures for admitting patients into mental hospitals and general information about state facilities for the treatment of these patients be made available, (2) the committee maintain a close relationship with the newly formed Steering Committee for Continuing Psychiatric Education of the Physician, and (3) the committee concern itself with the problems of drug abuse and misuse.

(1) The handbook for physicians has been completed and if accepted by the Board of Trustees, it will be reproduced and distributed to the membership of TMA.

(2) Since there is some overlapping in the membership of the Committee on Mental Health and the Steering Committee for Continuing Psychiatric Education, there is a continuing support of the Steering Committee in its efforts to develop strong programs in continuing education.

(3) The Committee has concerned itself with the problem of physician education in the field of drug abuse and misuse and reviewed carefully the AMA Drug Abuse Information Kit. A statewide conference on this topic was considered, but it was felt that it might be possible to get a wider response if the county medical societies could be encouraged to devote one of their meetings to this subject. In order to implement this, each society was furnished with one of the AMA kits with an expression by the committee of its willingness to obtain a speaker for the program if needed. Two societies requested a speaker and they were supplied. It is anticipated that other requests will be received.

It was pointed out in the report that the Commissioner of Mental Health is anxious to obtain a modification of the state licensure laws in such a manner that competent foreign physicians, who are not able to take the examinations for state licensure until they become citizens, would be allowed a temporary license. The Committee supported the Commissioner in this effort and recommended that this be communicated to the sub-committee of the Board of Trustees, established to study this problem.

The Committee also recommended that support be given to the Department of Mental Health in its efforts to secure legislation to establish a law that would allow temporary detention of a mentally ill patient who is unwilling to submit to a medical examination.

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "This is a subject in the forefront of health issues today. The Committee is commended for the Handbook it has prepared to better inform physicians regarding existing state facilities and the admission of patients thereto. It is felt that there needs to be a far greater dissemination of information, both within and without the profession, on the subject of drug abuse and the Committee is urged to extend its efforts in this regard, providing if possible qualified speakers to discuss this subject effectively with all segments of our society, especially the pre-teen to college age groups. The problem of providing adequate staff to our state mental institutions, and the utilization of foreign physicians in fulfilling these staff appointments is recognized, and is a subject that needs further study. The important work of this Committee is acknowledged and your acceptance of this report is advised."

THE HOUSE accepted the report.

Report of Health Project Contest Committee

LAWRENCE L. COHEN, M.D., Chairman

The 16th annual Health Project Contest, sponsored by TMA and the Woman's Auxiliary to TMA, was again considered a success and a worthwhile endeavor. Awards totaling $1,250 were presented to four winners. In previous years five awards have been presented, however there was a tie for third place in 1969 and the prize money for third and fourth place was combined to give two third place awards of $175.00. Winning entries were:

First Place: Boones Creek High School, 12th Grade Health Class, Jonesboro—"Care for the Elderly" —$500

Second Place: Westwood Junior High School, 9th Grade Science Class, Manchester—"Teenagers and Drugs"—$300

Third Place: Brainerd Senior High School, 11th Grade Special Home Economics Class, Chattanooga—"Better Mental Health Adjustment for Teenagers"—$175

Third Place: North Nashville High School, 12th Grade Biology II Class, Nashville—"Mental Health—Everybody's Business"—$175

Fifth Place: Brainerd High School, Science Club and Chemistry Class, Chattanooga—"Air Pollution"—$100

The fifth place award is presented by the Woman's Auxiliary to the Tennessee Medical Association. The Chairman expressed appreciation to the Tennessee Department of Education for their continued support with TMA and the Auxiliary in promoting this statewide contest. He commended the local Auxiliary Chairmen for their excellent work and extended special appreciation to the three judges who gave of their time to evaluate each of the entries submitted.

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The entries covered a variety of timely health care topics and reflected a tremendous amount of work expended by the students and their sponsors.

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "A review of the subject matter of the health contest projects is indeed encouraging for they embody many of the major health problems of today. That our young people are considering these problems is reassuring and the attendant hidden values extend far beyond the financial support provided. This deserves our continued fullest support and acceptance of this report with commendation is recommended."

THE HOUSE accepted the report.

Report of the Tennessee Committee for the American Medical Education and Research Foundation

THOMAS J. ELLIS, M.D., Chairman

"The AMA-ERF was established in 1962, as a successor to the American Medical Foundation, and the American Medical Research Foundation. At the present, there are six programs in operation under the AMA-ERF. These are: Funds for Medical Schools; Medical Education Loan Guarantee Program; Categorical Research Grants; Fellowship Program in Medical Journalism; Institute for Biomedical Research; and the Committee for Research on Tobacco and Health.

"The total contributions in 1968 nationally amounted to $1,120,345.88. In Tennessee, physicians gave $10,052 to the national total while the Woman's Auxiliary to the Tennessee Medical Association raised $22,124.15 through their efforts. Only seven states in the nation surpassed this amount. The total contribution by the Auxiliary was exceeded only by two states, California and Ohio."

The three medical schools in Tennessee received a total of $39,230.48 from the AMA-ERF program: Vanderbilt University School of Medicine, $14,529.38; University of Tennessee College of Medicine, $18,625.30; and Meharry Medical College, $6,075.80.

The Chairman called attention to the fact that the success of the program in Tennessee was primarily due to the efforts of the Woman's Auxiliary, and strongly urged the physicians of the state to support the AMA-ERF with a contribution in 1969.

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "Whereas Tennessee has supported well the AMA-ERF, on a comparative basis with other states, this important effort on the part of the AMA deserves even broader and greater financial support. The phenomenal achievement on the part of the Woman's Auxiliary is the prime basis for Tennessee's good record and it is to be recognized and further encouraged. Acceptance of the report is recommended with a standing rousing ovation to the ladies of the Auxiliary."

THE HOUSE accepted the report.

Report of Committee on Sight Conservation

I. LEE ARNOLD, M.D., Chairman

The report of the Committee on Sight Conservation contained two recommendations:

(1) That support be given by the Tennessee Medical Association to all screening programs for amblyopia being conducted in the State of Tennessee, such as that conducted under the Head Start Program in Nashville and under the jurisdiction of the Shelby County Health Department and the American Red Cross in Memphis in cooperation with the Parent Teachers Association. This consists of administering a screening test such as the "E" Chart or animal chart to the children of 3-4 years of age who are in kindergartens, nurseries, community centers, health centers, and other convenient places, in order to detect primarily poor vision in one eye. It is estimated that about three percent of all preschool children suffer from amblyopia, most of which is undetected and is correctable.

(2) That the TMA Legislative Committee consider legislation to provide for the re-examination of all licensed automobile drivers in the state periodically. The periodic examination of automobiles is well accepted in most states, however it was the opinion of the Committee that the re-examination of the driver is far more important than the automobile he drives.

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "The efforts of this Committee toward the early detection of visual disturbance in childhood is laudatory. On the subject of traffic safety the fallacy of having a safe car and an unsafe driver is well expressed. It is felt that the subject of driver safety needs further thoughtful consideration and might properly be the assignment of a special 'ad hoc' committee. Acceptance of the report is recommended."

THE HOUSE accepted the report.

Report of Interprofessional Liaison Committee

WM. H. EDWARDS, M.D., Chairman

"The Code of Cooperation for the Tennessee Medical Association and the Tennessee Bar Association referred by the House of Delegates to the Board of Trustees was edited and adopted by the TMA Board and the Board of Governors of the Tennessee Bar Association. This Code will soon be availa-

ble to all physicians and attorneys of the state and it is hoped that it will be used as guidelines to establish better lines of communication between physicians and attorneys.

"The Tennessee Bar Association, through its Interprofessional Liaison Committee, requested an evaluation of medical malpractice screening committees. Such committees have been formed in other states and in counties within states in an attempt to protect physicians from unjustifiable malpractice claims and to make available to the patient expert medical testimony when indicated.

"The problem of medical malpractice has received considerable attention in the past few months, and in November of 1968 the AMA NEWS devoted attention to the problem, evaluating it from the standpoint of the physician, insurance carrier, and the plaintiff's attorney. Increase in premium rates for malpractice insurance has occurred in many states and in certain states, obtaining malpractice insurance is a major problem. The physician's vital position in a malpractice claim cannot be ignored.

"With this background the Interprofessional Liaison Committee obtained data from many states and held meetings with the Liaison Committee of the Bar Association. From the meetings and the data, it was the conclusion of our committee that at the present time the physicians of Tennessee enjoy an excellent and enviable position with their insurance carriers, the attorneys, and are under no direct threat of problems with medical malpractice. Hopefully this position will be maintained and improved and that the number of claims, and subsequently insurance, will not rise in our state.

"The Interprofessional Liaison Committee would therefore at this time acknowledge the request of the Tennessee Bar Association for consideration of medical malpractice screening committee and would feel that such a committee or committees would not be in the best interest of the physicians of our state. The members of this committee would, however, urge close cooperation between physicians and attorneys and would hope that by such cooperation we could prevent further problems from occurring within our state.

"In conjunction with the Tennessee Nursing Association, consideration was given to a statewide conference of physicians and nurses as participants for a discussion of mutual problems between the two professions. These discussions are continuing and further recommendations and implementation will follow."

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "This Committee has excelled in establishing effective liaison with the Tennessee Bar Association, and the Code of Cooperation which has been developed is a document each member of both Associations should become fully conversant with, for no man today practices medicine solely unto himself. The subject of malpractice is so paramount in the day to day practice of medicine that this Committee is urged, along with the Committee on Insurance, to keep a close surveillance on malpractice trends and problems both in and outside of this State, keeping informed on the operation of malpractice screening committees and other measures being used elsewhere to cope with this problem. It is agreed that there needs to be a closer dialogue between the medical and the nursing professions and it is hoped that advances can be made toward this goal in much the same manner as improved liaison has been obtained with the hospitals and those responsible for their administration. Recognition of the outstanding work of this Committee is requested by your acceptance of their report."

THE HOUSE accepted the report.

Report of Committee on Medicine and Religion

I. Lee Arnold, M.D., Chairman

"The principal concern of the Committee has been to reactivate the Committee and create interest in the treatment of the patient as a whole being affected by physical, spiritual, emotional, and social factors. Mr. Carl H. Peterson of the AMA has been instrumental in creating interest in this area, and has provided an exhibit which is on display at this meeting.

"Secondly, several of the committee members attended the Regional Workshop on Medicine and Religion held in Atlanta on March 15.

"In conjunction with the Committee on Cancer the Committee on Medicine and Religion is planning the development of a physician-minister conference. Conferences of this type would be valuable in achieving the purpose of this committee by creating the proper climate for communication between the physician and the clergyman that will lead to the most effective care and treatment of the patient.

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THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "The effective treatment requires treating the 'whole patient' is recognized by every physician. Toward this end, there must continuously exist a close physician-minister relationship. Such is the object of this Committee and its efforts to accomplish this are commended for your acceptance."

THE HOUSE accepted the report.

Report of Committee on Rehabilitation

JAS. C. GARDNER, M.D., Chairman

The Medical Advisory Committee to the Tennessee Division of Vocational Rehabilitation held its annual meeting in Gatlinburg, August 30-September 1, 1968. The meeting was devoted to a detailed study of the activities of the Division for fiscal year 1967-68 including such areas as referrals to the Division, rehabilitated closures, expenditures information, fees for medical services and policies on the use of hospitals.

"Considerable discussion was devoted to the subject of fees for medical services. The Medical Advisory Committee again recommended reimbursement for physicians' services on the basis of usual and customary fees. This could not be done due to the Division's financial limitations, however, some minor adjustments were made in surgery and anesthesiology fees. The Administrative Staff of the Division is in favor of the payment of usual and customary fees and has every intention of establishing such a system within the near future, hopefully by July 1, 1969.

"In reference to the Division's policy on use of hospitals, a rather significant change has been made. In addition to using hospitals that are approved by the Joint Commission on Accreditation, the Division is also now using those hospitals that are certified by Medicare as (1) having no significant deficiencies or (2) having correctable deficiencies. The Advisory Committee feels that this change in policy will enable the Division to continue to provide a high quality of service inasmuch as many community hospitals are well equipped and are staffed with well qualified physicians."

The Chairman reported on the progress realized by Vocational Rehabilitation in Tennessee in 1968, and briefly discussed the programs and services available. A copy of the Division's annual report and a booklet describing the services available through the Rehabilitation Program were furnished to all members of the House of Delegates.

The Committee reported that the rehabilitation program in Tennessee is doing a creditable job and that a good relationship between the State Division of Vocational Rehabilitation and the medical profession has continued.

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "The work of this Committee is of increasing importance as the effort towards greater and more effective rehabilitation of the disabled in this state moves ahead. . . . There is much responsibility on the shoulders of this Committee whose report is commended for your acceptance."

THE HOUSE accepted the report.

Report of the Committee on Governmental Medical Services

TOM E. NESBITT, M.D., Chairman

"Again during 1968 the main objective and activity of the Committee on Governmental Medical Services was to improve and strengthen the position of medicine in the State of Tennessee relative to the number of programs which concern themselves with expenditure of federal and state tax funds for medical services.

"At the last report of this committee to the House of Delegates, four areas of concern were outlined while during this past year, the committee has concerned itself with two major items. The main objective has been to work with State Officials encouraging the use of the same fiscal intermediary for reimbursing physicians under Tennessee's Title XIX program as is currently being used by the federal government for Medicare. In addition, the Equitable Life Assurance Society, as Part 'B' Medicare fiscal intermediary, requested the committee to meet with them to discuss and make recommendations relative to Medicare problem areas.

"Regarding the efforts of TMA and your committee in particular, in working with the State Administration, I am most pleased to report that our recommendation that two fiscal intermediaries be utilized for Title XIX as under Medicare, has prevailed. Although at the writing of this report no formal announcement of this fact had been made, TMA was officially notified by the Department of Public Health that the decision to utilize the same carrier for the payment of physicians' fees under Title XIX as for Medicare had been reached. The main concern at the time this report was written was whether or not the program would be implemented July 1, 1969 as originally planned. Efforts by some members of the Tennessee General Assembly to delay implementation until January 1, 1970 caused a considerable amount of concern among physicians as well as other providers of services and state officials.

"Although the general area of a fiscal intermediary has consumed most of this committee's time and efforts, the implementation of the State's Title XIX program could well produce a variety of problem areas for the Committee in the future. TMA is concerned with the overall success of the program and not just reimbursement of physicians for their services. We intend to continue in our efforts to see that the best program possible is made available to the recipients and medically needy.

"A ruling handed down by the Department of HEW pertaining to the reimbursement of hospital based physicians by the Part 'B' intermediary caused a great deal of concern on the part of many TMA members. A meeting was held with the intermediary's Medicare manager to discuss the new ruling. In addition to committee members, representatives of the state radiological and pathological societies also attended the meeting. I believe the meeting produced a better understanding among those present of the requirements imposed on the fiscal intermediary by HEW and I believe as a result of the meeting several misunderstandings were eliminated.

"An area of considerable concern to the committee in the past has improved immeasurably since the last annual meeting. The Regional Medical Program problems have been greatly reduced.

"Most delegates are aware that the Governmental Medical Services Committee is composed of the chairmen of eight of perhaps the most active TMA committees. I would like to express my appreciation to each committee member for their willingness and readiness to meet on short notice when a government official or agency requested a meeting. We shall continue in our efforts to properly represent TMA with all government agencies and programs.

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "The stellar accomplishment of this Committee in the selection of the Equitable Life Assurance Society as the fiscal intermediary for reimbursing physicians under Tennessee's Title XIX program should be recognized by all. The task at times appeared formidable. With the further passage of time, this Committee's role will inevitably increase in scope and in importance to the profession. The efforts of this Committee are applauded and acceptance of the report is recommended."

THE HOUSE accepted the report.

Report of the Utilization Review Committee

R. H. Kampmeier, M.D., Chairman

Guidelines offered by the Utilization Committee in 1968 were approved by the House of Delegates with the stipulation that the Committee reconsider them and report to the Board of Trustees. The Committee met for a discussion of the guidelines, not only because of the stipulation mentioned, but also because in practice it had been found that the guidelines were too restrictive as interpreted by the fiscal intermediary.

The Committee agreed that it would be appropriate to make two revisions in the guidelines as approved in 1968, namely in regard to the Section on Extended Care Facilities, and secondly, as related to the charges submitted by physicians for frequent visits to extended care facilities or nursing homes.

The Board of Trustees approved the revisions and authorized the Committee to supply the revised guidelines to the fiscal intermediary, and furthermore decided that the guidelines should not be adopted as policy of the Tennessee Medical Association and therefore no action would be required by the House of Delegates. (A copy of the revised guidelines were circulated to members of the House of Delegates for their information.)

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, recommended acceptance of the report.

THE HOUSE accepted the report.

Report of Committee on Regional Medical Programs

W. O. Vaughan, M.D., Chairman

The 1968 report of the Committee took exception to some of the practices and policies of the Tennessee Mid-South Regional Medical Program. These criticisms pointed to a lack of liaison between the RMP and various local societies as well as the Tennessee Medical Association. There was also the feeling that members of the Regional Advisory Group had not been given a reasonable opportunity to study the various grant applications or to cast a meaningful vote of approval or disapproval of each application.

"We can now report that the Tennessee Mid-South RMP has made a number of policy changes and has taken several important actions which, I believe, completely overcome the criticisms voiced a year ago. Local area coordinators, who are physicians, have been appointed in each area, and one of their principal functions is to establish liaison with the practicing physician and health organizations of their particular area.

"A mechanism for development and review of

operational and continuing grant applications has been established and followed. Separate categorical scientific study groups have been established in the field of heart, cancer, stroke and continuing education. The Chairman of each of these groups is a practicing physician and a member of TMA. Six members of each group were nominated by TMA and accepted by the RMP.

"During the past year an adequate description of each grant application has been circulated to members of the Regional Advisory Group well in advance of the meeting dates and they have been given an opportunity to approve, disapprove and evaluate each project.

"The Chairman of the TMA Committee on Regional Medical Programs serves as a member of the Executive Committee of the Tennessee Mid-South RMP. The acting director of the Mid-South RMP appeared before the TMA Board of Trustees in January for a discussion of problems and guideline projects under consideration, which might be of a statewide import. All of these steps have been taken with a view to meeting the criticisms of TMA voiced a year ago.

"There are 25 projects which became funded and operational on February 1, 1968 and are now in their second year of operation. In the Fall of 1968, six additional projects completed the review process successfully and were forwarded to the Division in Washington. There were five more projects which were approved at the State level and were forwarded to Washington on March 1, 1969. These eleven projects have not yet been funded. During the latter part of 1968, the Tennessee Mid-South Program had more operational projects than any other Regional program in the Nation."

The Chairman reported that the Memphis Regional Medical Program is also moving ahead and now has 23 proposals under way.

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "Continued close liaison with the two regional medical programs in Tennessee is essential. Acceptance of the report is recommended."

THE HOUSE accepted the report.

Report of the Committee on Comprehensive Health Planning

EUGENE W. FOWINKLE, M.D., Chairman

An official meeting of the TMA Committee on Comprehensive Health Planning was not held during the year, however, all of the committee members serve on the State of Tennessee Comprehensive Health Planning Council and its special committees. The Chairman reported that within the meetings of the Council and its committees, the medical profession had been well represented by members of the TMA Committee.

Dr. G. Baker Hubbard serves as co-chairman of the Council and member of the Executive Committee. Dr. Hubbard and Dr. Lloyd C. Elam are members of the Health Manpower Committee. Dr. Fowinkle served as temporary chairman of the Health Services Committee after which Dr. William A. Hensley was elected chairman. Also serving on the Health Services Committee are Drs. K. M. Kressenberg and Edward W. Reed. Dr. Harold B. Boyd serves on the Health Facilities Committee, and Dr. Chas. C. Smeltzer serves as a member of the Environmental Health Committee.

The *Health Services Committee* met twice, organized, enlarged its membership with some representatives who are not Council members, explored its role, and is beginning to set up routine procedures. Working from the categories of problems listed by the Council and from reports of needs from individual counties, the following subjects were suggested at the second meeting, and partially developed:

(1) Emergency care including Acute Psychotic Episodes and Acute Alcoholic Poisoning, (2) Outpatient Services, (3) Availability and Accessibility of Health Service, (4) Utilization of Health Services, (5) Antepartal and Postpartal Care in Renal Areas, (6) Dental Care, (7) Improvement of Laboratory Services, (8) Communicable Disease Control, (9) Provision of special diets in small hospitals and nursing homes, (10) Rehabilitation problems of patients with Paraplegia, and (11) Pharmaceutical Services in small hospitals.

Two meetings of the *Health Facilities Committee* were held. To date, members of the Committee have been mainly arming themselves with background information supplied by the National Commission on Community Health Services and the Tennessee Department of Public Health. Three primary areas of interest adopted by the committee are: (1) Updating present studies and surveys on facilities and to incorporate better evaluation methods. (2) Recommend that high priority be assigned to the construction of Extended Care Facilities. (3) That there should be coordination of all facilities planning and construction, including both public, non-profit and private profit-making hospitals and nursing homes through the State Health Planning Council.

The *Health Manpower Committee* conducted two meetings. The initial meeting was primarily devoted to organization and the election of officers. The second was devoted to identifying specific problem areas and the selection of a subcommittee to establish specific priority areas for consideration and planning action. These specific problem areas are: (1) Recruitment, (2) Training of faculty, (3) Re-training and continuing education programs, (4) Restructuring and re-engineering of career patterns, (5) Utilization of personnel and skills, (6) Distribution of health personnel, (7) Improvement of health instruction in schools and the health education of the public, (8) Master's degree programs in nursing, (9) Upgrading of basic education, (10) The collection and evaluation of health manpower data, (11) Upgrading of working conditions, wages and other meaningful incentives.

The *Environmental Health Committee* in its first meeting reviewed information related to health problems of the environment in Tennessee, and selected solid waste disposal as a problem to be accorded the number one priority. Accompanying this decision, a joint meeting of the Environmental Health, Communications, and Legislative Committees met and decided to sponsor a Solid Waste Disposal Bill, which had been written by the staff of the Division of Environmental Sanitation, in the 1969 session of the Legislature.

"The State Comprehensive Health Planning Council has matured into a functional organization. It will soon begin to develop the components of a comprehensive state health plan. As the Council and its special committees review health problems within the state and begin to draft recommendation, it will undoubtedly be necessary that the Tennessee Medical Association Committee on Comprehensive Health Planning become active as a unit and establish appropriate liaison between the State Comprehensive Health Planning Council and the Tennessee Medical Association."

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "Continued close involvement of the medical profession including the private sector of medicine is essential if this program to to advance in a meaningful way. Continued physician participation is urged and approval of the report is recommended."

THE HOUSE accepted the report.

Report of Committee on Continuing Medical Education

R. H. Kampmeier, M.D., Chairman

For several years increasing attention has been directed to the lag between advances in medical knowledge and their application to provide adequate and modern medical care. This has been pointed up by many writers for the lay public, by committees or commissions of the AMA, and by government through emphasis on continuing education as the real basis for the Regional Medical Programs. The 1967 Report of the National Advisory Commission on Health Manpower made strong recommendations with respect to relicensure and/or recertification.

The American Medical Association through its Council on Medical Education in Hospitals has urged upon all state associations, if not already involved, to give serious attention to the continuing education of its members and to give thought to its role in documenting the educational activities of its members for the purposes of recertification when and if this becomes a duty of either the state medical association or of the American Medical Association.

The Board of Trustees established the Committee on Continuing Medical Education in 1968 and the Committee had met on two occasions.

"A philosophic approach to the continuing education of members of TMA has been developed, and the Committee stands ready to begin to implement this program following action of the House of Delegates. (The Chairman and a member of the TMA staff attended a two-day conference called by the AMA upon the subject of continuing education last November, which was attended by representatives of each of the state medical associations. We found that the basic tenets set by our Committee are not unlike those considered by medical representatives across the nation, except for details related to geography, facilities, and population.)"

Awaiting action of the House of Delegates on its recommendations, the Committee had, for informational purposes, sent a letter to each hospital and its chief of staff within the state to acquaint those having interest with the planned approaches to continuing education as developed by the Committee. A copy of the letter was sent to the secretary of each specialty society for infor-

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mation and discussion at their meetings held currently with that of the TMA.

The Regional Medical Programs will have an important role in their anticipated collaboration and cooperation with the TMA Committee on Continuing Education.

The Committee has used the editorial page of the Journal to keep the members informed of the ferment of this area of medical interest and plans to continue to do so.

THE REFERENCE COMMITTEE on Reports of Special Committees, A. Roy Tyrer, Jr., M.D., Chairman, commented: "The subject of continuing medical education is in the foreground of medical discussion locally and nationally. The complexities are formidable but the need is established and recognized, and the medical profession must provide the leadership to the solution. Deeper, penetrating study is imperative, with closer coordination of existing programs, and increased leadership on the part of TMA and its constituent medical societies. The diligent efforts of this Committee are recognized and further urged with recommended acceptance of the report."

THE HOUSE accepted the report.

Special Committees Not Reporting

1. Committee on Blood Banks and Medical Laboratories
2. Committee on Youth and Education
3. Claims Review Committee
4. Liaison Committee to Medical Schools

SPECIAL REPORTS

Report of Woman's Auxiliary to Tennessee Medical Association

Mrs. A. L. Jenkins, President

"Mr. Speaker, Members of House of Delegates: Thank you for giving your wives the privilege of being an Auxiliary to the Tennessee Medical Association. We appreciate your support and interest in our activities. The financial support that made it possible to send more of our members to national workshops, mail out more information and in general be able to keep our lines of communication across the state open has already become effective in creating more interest in the work of the Auxiliary.

"Perhaps the best way to summarize our work for the past year is to tell you briefly the ways we have endeavored to carry out the objects of the Woman's Auxiliary to the TMA. Our first objective is: 'To assist the Tennessee Medical Association in its program for the advancement of medicine and public health.' We were pleased to receive a request from you that we stress the timely need to educate our communities on 'The Use and Abuse of Drugs.' This was carried into several auxiliaries' monthly programs. The Davidson County Auxiliary reached 1,500 students with a team of pharmacy students from the U.T. School of Pharmacy who visited several high schools with lectures on the hazards of drug addiction. This was so successful that it will be repeated this spring to reach those who requested the team.

"Woman hours have been spent aiding rehabilitation centers, manning booths at Health Fairs, teaching GEMS (good emergency mother substitutes) courses, cooperating with Red Cross in training volunteers to assist in nursing homes and at the hospital. One Auxiliary purchased a much needed tape recorder to be used in a new center opened for the severely retarded children and adults who were not eligible for the school classes for the educable. Many of our auxiliaries continue to aid in the obtaining of and showing educational films as requested by schools in an attempt to lower the incidence of venereal diseases in our teenagers. Two auxiliaries have aided their medical groups in the obtaining from national the 'Sex Education Kits,' which is a first in many schools.

"A survey of what our state has to offer in Allied Health Fields has been conducted. The report is not complete; but with 7 of our 16 organized auxiliaries reporting, we find that we have 1,770 enrolled in the following: Dietetics, Medical Assistants, Medical Research Librarian, Medical Technician, L.P.N., R.N. (associate degree, diploma), Optometrist, Speech and Hearing Therapist, X-Ray Technician. Of these 715 will graduate this year. To create interest in health careers, we have aided in career clubs in high schools. One group sponsored a bus to Nashville for a visit to Vanderbilt for those interested in Health Careers; we cooperated with guidance counselors in high schools; we placed TODAY'S HEALTH in schools, we placed the booklet 'HORIZONS UNLIMITED' in junior and senior high schools.

"Our second objective is: To coordinate and advise concerning the activities of component auxiliaries. The third objective is: To cultivate friendly relations and promote mutual understanding among physicians' wives. There is no better way to gain understanding than to work for a common cause trying to improve our communities."

In concluding her report, Mrs. Jenkins thanked the Advisory Committee for its counsel and requested the assistance of the delegates in encouraging the wife of every TMA member to become a member of the Auxiliary.

THE REFERENCE COMMITTEE on Special Reports, A. Roy Tyrer, Jr., M.D., Chairman, commented: "Reference has already been made to the superb job done by the Woman's Auxiliary of this State in the matter of obtaining support of the AMA-ERF. This however represents only one of many projects and activities to which the ladies address their attention, several of which are enumerated in the President's Report. The effectiveness of feminine influence is a non-

debatable subject and we doff our hats to the contributions they make year after year to our Association and to our profession. Your acceptance of the report of their President is recommended with proper accolades."

THE HOUSE accepted the report.

Report of AMA Delegation

JOHN H. BURKHART, M.D., Chairman

Since the last session of the TMA House of Delegates, two meetings of the AMA House of Delegates were held and were attended by the full compliment of eligible delegates from TMA. The Annual Meeting was held in San Francisco in June, 1968, and the Clinical Meeting was held in Miami Beach, in November.

In view of the fact that every member of TMA had an opportunity through the Journal of the American Medical Association, the Journal of the Tennessee Medical Association, the AMA News, and other periodicals, to become acquainted with the details of these meetings and the actions taken, the Chairman briefly enumerated some of the major happenings and actions of the two meetings:

—At the Annual Meeting, Dr. Dwight L. Wilbur of California assumed the office of President and Dr. Gerald Dorman of New York was elected President-Elect by acclamation.

—The House approved a resolution which would amend the By-Laws of the AMA to provide that in addition to receiving appeals filed by applicants who alleged that they have, because of color, creed, race, religion, or ethnic origin, been unfairly denied membership in a component and/or constituent association, the Judicial Council shall if it determines these allegations are indeed true admonish, censure, or in the event of repeated violations, recommend to the House of Delegates that the State Association involved be declared to be no longer a constituent association of the American Medical Association. The Council on Constitution and By-Laws was directed to draw up the necessary new wording for the By-Laws for action at the next meeting of the House. This was done and adopted at the Clinical Meeting.

—A Judicial Council report was adopted on "Ethical Guidelines for Organ Transplantation." One of the several important guidelines was that "When a vital single organ is to be transplanted, the death of the donor shall have been determined by at least one physician other than the recipient's physician. Death shall be determined by the clinical judgment of the physician, and in making this determination the ethical physician will use all available currently accepted scientific tests."

—The House, in annual session, faced one hundred and forty-three items of business, including eighty-four resolutions, thirty-nine reports from the Board, seven from the Council on Constitution and By-Laws, four from the Council on Medical Education, five from the Council on Medical Service, two from the Judicial Council, and two special reports.

—Shortly after the annual meeting, an announcement was made by the Board of Trustees of the AMA that Dr. F. J. L. Blasingame had been relieved of his duties as Executive Vice-President of the American Medical Association. Much of the conversation and many of the reports and resolutions at the Clinical Meeting in Miami Beach were in direct reference to this action on the part of the Board.

—The House rejected an amendment to the Constitution and the By-Laws which would have placed the Vice-President as a voting member of the Board of Trustees.

—As has been the case for the last several years, attempts were again made to define the terms "usual, customary, and reasonable" and they were once again defined by the adoption of a resolution which will, in all probability, be changed at the next annual meeting.

—A report of the Council on Medical Education contained the essentials for graduate training programs in family practice. This document was developed as one of the steps in implementation of the recommendations of the report of the Ad Hoc Committee on Education for Family Practice as directed by the House of Delegates in November 1966. Following this, the House adopted a resolution that the AMA affirms the importance of providing appropriate recognition for family physicians through approval of a primary specialty board for family practice and that the Council on Medical Education be encouraged to continue its efforts with the American Academy of General Practice and the AMA Section on General Practice to achieve this goal.

—A resolution opening membership in the AMA, State, and County Societies to Osteopathic physicians was adopted by a narrow margin. This resolution requested a change in the AMA Constitution and By-Laws so that qualified doctors of Osteopathy may be admitted to full active membership in the American Medical Association. The Council on Constitution and By-Laws was directed to prepare the necessary amendment for presentation to the House at the annual meeting.

"There were many other items of business at the Clinical Convention which included thirty-four reports, and sixty resolutions. It would take a great deal of this House of Delegates' time to even enumerate these, much less to discuss the important ones. It is hoped that this brief report will suffice to inform you that your AMA Delegation has been faithfully about the business to which you have assigned it. At the

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end of my report last year I stated that all meetings of the American Medical Association are milestones and that the 1967 meetings were no exception. This applies equally well to the 1968 meetings."

THE REFERENCE COMMITTEE on Reports of Special Reports, A. Roy Tyrer, Jr., M.D., Chairman, commented: "Tennessee's sphere of influence on the national level is not unrecognized. It is almost impossible to relate to you the multitude of activities in which the AMA is engaged on behalf of each of us. May I commend to you this synopsis, and may I assure you that your elected delegates are representing you and your interests with fervor and diligence. Acceptance of this report is recommended."

THE HOUSE accepted the report.

Report of Tennessee Medical Association Student Education Fund

JOHN H. BURKHART, M.D., Chairman

"In June of this year, the Tennessee Medical Association Student Education Fund will conclude its sixth successful year of operation. During this time, it has loaned $47,900 to twenty-nine different recipients. The current status of these loan recipients may be broken down as follows: medical school—6, internship—6, residence—4, military obligation—4, private practice—2, interrupted training (paying on loan)—2, and interrupted training (paid off loan)—5. At present, the outstanding loans amount to $38,070 and there is currently $16,284.70 available for future loans.

"During the past year, the following changes were made in the promissory note which each loan recipient must sign: (1) The loans granted by TMA-SEF now mature one year after graduation from medical school, (2) after maturity, all loans bear interest at a rate of 6% per annum until paid, and (3) after repayment begins, each recipient is required to make a minimum repayment of 20% of the outstanding balance of the loan each year until the full amount is repaid within five years. The TMA-SEF loan program is unique in that it does not bear interest until maturity, and priority is given to first year medical students. Most student loans are granted after completion of the freshman year and bear interest from the start.

"Also this year, a brochure describing TMA-SEF was published for distribution to the TMA membership, for the individual members of the TMA-SEF Board of Directors as an interview aid, and also to eliminate superfluous correspondence with individuals inquiring about a loan from TMA-SEF.

"On behalf of the TMA-SEF Board of Directors, I would like to emphasize the importance of the perpetuation of this loan fund, not only to provide financial support to medical students but also as a way of demonstrating the interest of the physicians in Tennessee for the future of medical education. This has been an eminently successful and rewarding activity for the Tennessee Medical Association and I solicit your continued support."

THE REFERENCE COMMITTEE on Special Reports, A. Roy Tyrer, Jr., M.D., Chairman, commented: "The physicians of Tennessee are to be commended for providing their own student loan fund as well as supporting generously the AMA-ERF. Acceptance of the report is recommended."

THE HOUSE accepted the report.

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Abstract of the Minutes of the Meeting of the Board of Trustees, Tennessee Medical Association— Riverside Motor Lodge—Gatlinburg, Tennessee April 13, 1969

The Board of Trustees of the Tennessee Medical Association convened for the regular second quarter meeting, following the TMA Annual Meeting, on Sunday, April 13, 1968.

Members of the Board present were:
Francis H. Cole, M.D., Memphis
Robert L. Chalfant, M.D., Nashville
Byron O. Garner, M.D., Union City
Tom E. Nesbitt, M.D., Nashville
Edward T. Newell, Jr., M.D., Chattanooga
C. Gordon Peerman, M.D., Nashville
John H. Saffold, M.D., Knoxville
Wm. T. Satterfield, Sr., M.D., Memphis
John O. Williams, M.D., Mt. Pleasant

Two members were absent: Dr. R. L. DeSaussure of Memphis and Dr. J. J. Range of Johnson City.

Dr. John H. Saffold, Knoxville, was named Chairman of the Board; Dr. Wm. T. Satterfield, Sr., Memphis, Vice-Chairman;

and Dr. Robert L. Chalfant, Nashville was re-elected Treasurer.

The following were nominated and elected to compose the committees of the Board: *Executive Committee*—Drs. John H. Saffold, Francis H. Cole, Robert L. Chalfant, Tom E. Nesbitt, and Edward T. Newell, Jr.; *Finance Committee*—Drs. Chalfant, Cole and Wm. T. Satterfield, Sr.; *Committee on Planning and Development*—Drs. Chalfant, Saffold, Nesbitt, Satterfield, Byron O. Garner, K. M. Kressenberg of Pulaski, and Chas. C. Smeltzer, Knoxville; *Advisory Committee to OASI*—Dr. Jas. C. Gardner, Nashville, Dr. Harmon L. Monroe, Erwin, and Dr. R. B. Wood, Knoxville; *Publications Committee*—Dr. Addison B. Scoville, Jr., Nashville, Dr. James M. Hudgins, Nashville, Dr. James T. Robertson, Memphis, Dr. R. H. Kampmeier, Nashville, ex-officio; and Mr. J. E. Ballentine, Executive Director, TMA, ex-officio.

Two Trustees were reappointed as Division Coordinators. They are: Dr. Robert L. Chalfant—Division on Communications and Public Service; and Dr. Wm. T. Satterfield, Sr.—Division on Socio Economics, Insurance and Medical Service. Dr. J. J. Range was appointed coordinator of the Division on Scientific Advancement; Dr. Byron O. Garner, coordinator of the Division on Legislative Affairs; and Dr. John O. Williams, coordinator of the Division on Governmental Medical Affairs.

(1) Reappointed Dr. R. H. Kampmeier as Editor of the Journal of the Tennessee Medical Association for a three-year term. It was directed that Dr. Kampmeier be advised of the Board's deep appreciation for his splendid service as Editor.

(2) Directed the Committee on Planning and Development to consider: (a) Proposals for re-organization of the Association's Committee structure; (b) Reconstitution of the Reference Committee system in the House of Delegates; (c) Development of plans for addition to the headquarters building.

(3) Completed appointments to the Standing and Special Committees of the Association for 1969-70—Approved a suggestion that each specialty society be requested to designate a member who represents the legislative thinking of their Society to attend the meetings of the TMA Legislative Committee.

(4) Authorized the TMA-THA Liaison Committee (sub-committee of the Committee on Hospitals) to jointly sponsor with the Tennessee Hospital Association, a conference on "Providing Emergency Care." The Committee was directed to explore the possibility of holding the conference in conjunction with the Hospital Association annual meeting in 1970.

(5) Considered and approved the First Quarter Financial Statement for 1969.

(6) Authorized a loan of $6,500 in 1969 to the TMA-SEF, to be released at such time that funds are needed for additional loans —Approved a donation of $500 to the University of Tennessee Chapter of Student American Medical Association in 1969, with the recommendation that a report of their activities and financial status be submitted to the Board of Trustees at the end of the year—Determined that the $100 sustaining membership in the national Student American Medical Association be continued in 1969.

(7) Considered a questionnaire received from the Chief Counsel of the U.S. Senate's Committee on Finance relative to the status of Medicare and Medicaid programs in Tennessee, and directed the Chairman of the Board, with the assistance of the Executive Director and TMA's legal counselor, to reply to the questionnaire.

(8) Resolution No. 6 opposing HEW efforts to take over confidential records or data pertaining to physicians, and a substitute Resolution No. 6 recommended by the Reference Committee on Resolutions had been referred to the Board of Trustees. The Board approved the Substitute Resolution No. 6 with amendments, and directed that a copy of the Resolution be furnished to the fiscal intermediaries in Tennessee, the State Departments of Public Health and Public Welfare, and to the Health Insurance Council for distribution to commercial insurance companies. It was emphasized that the Resolution established the policy of the Board of Trustees only, and that it would be necessary to have the approval of the House of Delegates to become the policy of the Tennessee Medical Association.

(9) Determined the date for the next regu-

HEALTH SCIENCES LIBRARY

lar quarterly meeting of the Board of Trustees—Requested the Executive Director to investigate the possibility of holding the 1972 annual meeting in Gatlinburg since it was believed that adequate facilities would not be available in Nashville at that time.

(10) Clarified Resolution No. 1 changing the format of the sessions of the House of Delegates. In 1970, the first session of the House of Delegates will convene at approximately 4:00 P.M. on Wednesday afternoon, recess for a buffet dinner, and reconvene to complete the agenda for the first session. The second session will be held on Saturday Morning, and the Board of Trustees will meet on Sunday Morning.

JOHN H. SAFFOLD, M.D., Chairman
J. E. BALLENTINE, Executive Director

* * *

Abstract of the Minutes of the Meeting of the Council, Tennessee Medical Association— Gatlinburg, Tennessee—April 12, 1969

The Council of the Tennessee Medical Association convened, April 12, 1969 immediately following the last session of the House of Delegates, with Dr. B. G. Mitchell, Chairman, presiding. The following members of the Council were present: Dr. J. Marsh Frere, Jr., Second District; Dr. Edward G. Johnson, Third District; Dr. Claude M. Williams, Fourth District; Dr. Lee Rush, Jr., Eighth District; and Dr. Mitchell, Tenth District.

Dr. B. G. Mitchell was re-elected as Chairman for 1969-70 and Dr. Lee Rush, Jr. was named Secretary of the Council. Discussions were held on the following subjects:

(1) *Corporation Owned Hospitals*—This discussion was particularly with reference to the ethics involved with the many new corporations entering into the hospital field through the purchase of presently owned city and county hospitals or the building of new hospitals to be run by such corporations, and the effect of such corporate management on the practice of medicine. With lack of knowledge about such matters at present, the Council decided to watch the developments with interest.

(2) *Assignments under Title XIX*—It was the opinion of the Council that efforts should be continued at the state and national society level to insure that the physicians can be paid on the basis of their usual and customary fees without the acceptance of assignments.

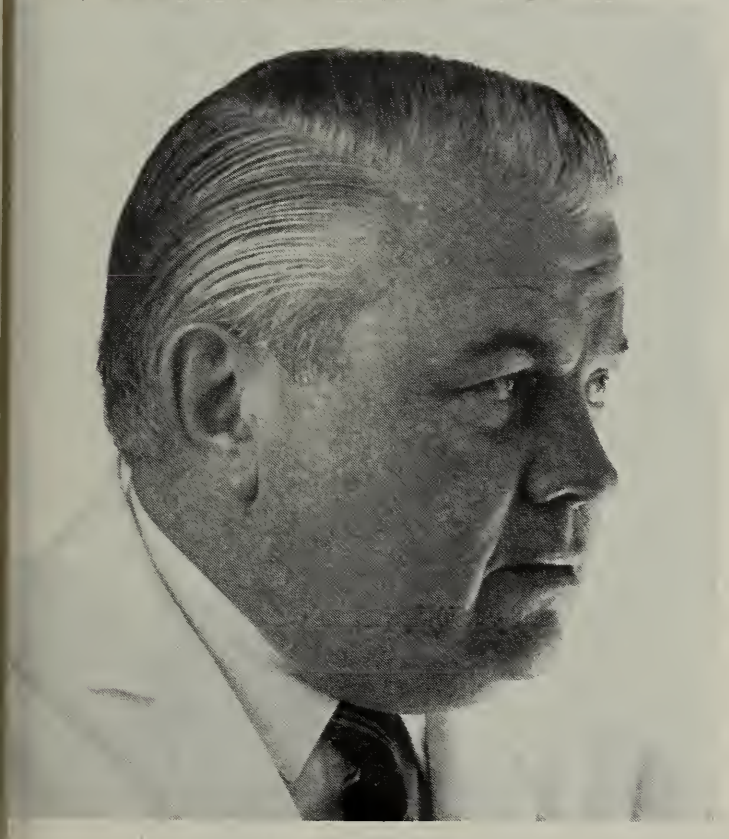
(3) *Podiatry*—Attempts by Podiatrists to make inroads into the physician's field of medicine should be watched and handled at the medical staff level.

(4) *Corporate Practice of Medicine*—It is the consensus of the Council that the essential problems of separate billing and separate collecting by hospital based physicians remains, and each Councilor was requested to investigate again the status in their respective district and report the findings to the Chairman of the Council.

B. G. MITCHELL, M.D., Chairman
LEE RUSH, JR., M.D., Secretary

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"Yes. Patients respond well to it, and seem to take it more faithfully."

Works well · Doesn't constipate · Tastes good · Economical

Supplied: Maalox Suspension (12 fl. oz.). *Also available:* Maalox No. 1 Tablets (0.4 Gm.) : no sugar, low sodium content. Maalox No. 2 Tablets (0.8 Gm.) : double strength for double antacid action.

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1969 TMA Annual Meeting—House of Delegates Composition
1st Session: April 10—2nd Session: April 12

EX-OFFICIO MEMBERS

OFFICERS

		First Session	Second Session
Speaker	Tom E. Nesbitt	Present	Present
Vice-Speaker	R. L. DeSaussure	Present	Present
President	Edward T. Newell, Jr.	Present	Present
President-Elect	Francis H. Cole	Present	Present
Vice-President	Madison S. Trewhitt	.....	.....
Vice-President	John S. Derryberry	Present	Present
Vice-President	William B. Acree	.....	.....
Secretary	James N. Thomasson	Present	Present

ELECTED TRUSTEES

West Tennessee	O. M. McCallum	Present	Present
West Tennessee	Wm. T. Satterfield, Sr.	Present	Present
Middle Tennessee	Robert L. Chalfant	Present	Present
Middle Tennessee	Charles A. Trahern	Present	Present
East Tennessee	Thomas J. Ellis	.....	.....
East Tennessee	John H. Saffold	Present	Present

AMA DELEGATES AND ALTERNATES

Delegate to AMA	John H. Burkhart	Present	Present
Delegate to AMA	Bland W. Cannon	.....	Present
Delegate to AMA	Tom E. Nesbitt	Present	Present
Delegate to AMA	W. O. Vaughan	Present	Present
Alternate Delegate	William F. Meacham	.....	.....
Alternate Delegate	Harmon L. Monroe	.....	.....
Alternate Delegate	A. Roy Tyrer, Jr.	Present	Present
Alternate Delegate	Julian K. Welch, Jr.	.....	.....

PAST PRESIDENTS

Past President	K. M. Kressenberg	Present	Present
Past President	John H. Burkhart	Present	Present
Past President	W. O. Vaughan	Present	Present
Past President	Bland W. Cannon	.....	Present

COUNCILORS

First District	Alvin S. Crawford	.....	.....
Second District	J. Marsh Frere, Jr.	Present	Present
Third District	Edward G. Johnson	Present	Present
Fourth District	Claude M. Williams	Present	.....
Fifth District	George L. Smith	.....	.....
Sixth District	B. K. Hibbett, III	.....	.....
Seventh District	Carson E. Taylor	.....	.....
Eighth District	Charles N. Hickman	.....	.....
Ninth District	Laurence W. Jones	Present	.....
Tenth District	B. G. Mitchell	Present	Present

OTHERS

Commissioner, Public Health	R. H. Hutcheson	Present	.....
Commissioner, Mental Health	Nat T. Winston	.....	.....

DELEGATES

East Tennessee Grand Division

County		First Session	Second Session
BLOUNT	R. H. Haralson	Present	Present
BRADLEY	William A. Garrott	Present	Present
CAMPBELL	Burgin H. Wood	.....	.....
CHATTANOOGA-HAMILTON	C. Robert Clark	Present	Present
	Robert G. Demos	Present	Present
	Durwood L. Kirk	.....	Present
	David P. McCallie	Present	Present
	Harry A. Stone	Present	Present
	David H. Turner	Present	Present
	George G. Young	Present	Present
COCKE	Wm. B. Robinson	.....	.....
GREENE	Robert S. Cowles, Jr.	Present	Present
HAMBLEN	Jas. W. Richardson	.....	.....
HAWKINS	Ralph Gambrel	.....	.....
KNOXVILLE ACADEMY	Walter H. Benedict	Present	Present
	Jacob T. Bradsher	Present	Present
	Perry M. Huggin	Present	Present
	John O. Kennedy	Present	Present
	Travis E. Morgan	Present	Present
	Ira S. Pierce	Present	.....
	Charles C. Smeltzer	Present	.....
	George A. Zirkle, Jr.	Present	Present
McMINN	Charles T. Carroll	Present	.....
MONROE	F. Houston Lowry	Present	Present
ROANE-ANDERSON	Raymond A. Johnson	Present	Present
	Joe E. Tittle	Present	.....
	E. C. Cunningham (Alt.)	.....	Present
SCOTT	Maxwell E. Huff	Present	Present
SEVIER	Charles L. Roach	Present	Present
SULLIVAN-JOHNSON	E. Kent Carter	Present	Present
	Bennett Y. Cowan	Present	Present
	Ellis U. Harr	.....	.....
WASHINGTON-CARTER-UNICOI	Charles E. Allen	Present	Present
	Nat E. Hyder	Present	Present
	Gilbert A. Rannick	Present	Present

Middle Tennessee Grand Division

County		First Session	Second Session
BEDFORD	John S. Derryberry	Present	Present
BENTON-HUMPHREYS			
COFFEE	C. H. Farrar	.....	.....
CUMBERLAND	Joe K. Wallace	.....	Present
NASHVILLE ACADEMY	Ben J. Alper	.....	.....
	Luthur A. Beazley	Present	Present
	George W. Bounds, Jr.	Present	Present
	Wm. H. Edwards	Present	Present
	James W. Ellis	Present	.....
	B. K. Hibbett, III	.....	.....
	Herman J. Kaplan	.....	.....
	I. Armistead Nelson (Alt.)	Present	Present
	Roy W. Parker	.....	.....
	C. Gordon Peerman, Jr.	Present	Present
	David R. Pickens	Present	Present
	Phillip P. Porch, Jr. (Alt.)	Present	Present
	Eugene Regen, Jr.	.....	.....
	Louis Rosenfeld	Present	Present
	Robert M. Roy	.....	Present
	Russell D. Ward (Alt.)	Present	Present
	C. C. Woodcock (Alt.)	Present	Present
DICKSON	Wm. M. Jackson	.....	Present
FENTRESS	B. F. Allred	.....	.....
FRANKLIN	James Van Blaricum (Alt.)	Present	.....
GILES	William K. Owen	.....	.....
HICKMAN-PERRY	Parker D. Elrod	.....	.....
JACKSON	E. M. Dudney	.....	.....
LAWRENCE	V. H. Crowder	Present	Present
LINCOLN	T. A. Patrick, Jr. (Alt.)	Present	.....
MACON	E. M. Froedge	.....	.....
MARSHALL	K. J. Phelps	Present	Present
MAURY	John O. Williams	Present	Present
MONTGOMERY	F. J. Malone	Present	Present
OVERTON	H. B. Nevans	.....	.....
PUTNAM	William A. Hensley	Present	Present
ROBERTSON	John B. Turner	.....	Present
RUTHERFORD	Carl E. Adams	Present	Present
SMITH	D. Gordon Petty	.....	.....
SUMNER	Halden W. Hooper	Present	Present
WARREN	James L. Moore	Present	Present
WHITE	Robert F. Baker	Present	Present
WILLIAMSON	Joseph L. Willoughby	Present	Present
WILSON	T. R. Puryear	Present	Present

West Tennessee Grand Division

County		First Session	Second Session
CONSOLIDATED	Thomas K. Ballard	Present	Present
	Bobby Higgs	Present	Present
	Lee Rush, Jr.	Present	Present
HENRY	Tom C. Wood	Present	.....
MEMPHIS-SHELBY	J. Malcolm Aste	Present	Present
	Harold B. Boyd	.....	.....
	Howard A. Boone	Present	Present
	Boyer M. Brady (Alt.)	.....	Present
	R. A. Calandruccio	.....	Present
	John B. Dorian	.....	Present
	John K. Duckworth (Alt.)	Present	Present
	Eugene W. Fowinkle	.....	.....
	Eugene W. Gadberry	Present	Present
	C. D. Hawkes	Present	Present
	Jean M. Hawkes (Alt.)	Present	Present
	Alvin J. Ingram	.....	.....
	Gilbert J. Levy	.....	.....
	George R. Livermore	.....	.....
	Robert P. McBurney	.....	.....
	Tinnin Martin, Jr.	Present	Present
	Raymond F. Mayer	Present	Present
	Sam P. Patterson (Alt.)	Present	Present
	John D. Peeples	.....	.....
	Henry G. Rudner, Jr.	.....	Present
	A. Roy Tyrer, Jr.	Present	Present
NORTHWEST ACADEMY	J. Kelley Avery	Present	Present
	J. C. Moore	Present	.....
	R. David Taylor (Alt.)	Present	Present
TIPTON	Warren Alexander	Present	Present
WEAKLEY	Edward H. Welles	.....	.....

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the meetings of the House, April 10 and 12.

From the Executive Director
J. E. Ballentine

MEDICAL DIGEST

News of Interest to Doctors in Tennessee

ELECTIONS—RESUME OF ACTIONS—HOUSE OF DELEGATES

1969 ANNUAL MEETING ATTENDANCE—905 . . . Total physician registration at the annual meeting in Gatlinburg, April 10-12, resulted in 575 doctors of medicine in attendance, 19 physician guests, 137 exhibitors and 174 members of the Women's Auxiliary, bringing the final total attendance to 905.

* * * * *

NEW OFFICERS FOR 1969-70 . . . Installed Dr. Francis H. Cole, Memphis, as President; elected Dr. Tom E. Nesbitt, Nashville, President-Elect; elected Dr. R. L. DeSaussure, Memphis, Speaker of the House of Delegates; elected Dr. Robert H. Haralson, Jr., Maryville, as Vice-Speaker of the House of Delegates; elected Vice-Presidents: Dr. Joe E. Tittle, Oak Ridge, East Tennessee; William H. Edwards, Nashville, Middle Tennessee and Charles N. Hickman, Bells, West Tennessee . . . Dr. C. Gordon Peerman, Nashville, was elected Secretary.

* * * * *

BOARD OF TRUSTEES AND COUNCILORS. . . Elected to the Board of Trustees for three year terms were: Drs. Byron O. Garner, Union City, J. J. Range, Johnson City, and John O. Williams, Mt. Pleasant . . . Re-elected for a three-year term was Dr. William T. Satterfield, Sr., Memphis. Dr. John H. Saffold, Knoxville, was named Chairman of the Board and Dr. Satterfield was elected Vice-Chairman . . . COUNCILORS: Newly elected Councilors were: Dr. Lee Rush, Jr., Somerville, for the Eighth District . . . Re-elected for two-year terms were: Drs. J. Marsh Frere, Jr., Knoxville, Second District; Claude M. Williams, Cookeville, Fourth District, B. K. Hibbett, III, Nashville, Sixth District; and B. G. Mitchell, Memphis, Tenth District.

* * * * *

AMA DELEGATES . . . Dr. Bland W. Cannon, Memphis and Dr. Wm. O. Vaughan, Nashville, were re-elected as delegates to the American Medical Association. Alternate delegates elected were: Drs. Julian K. Welch, Jr., Brownsville, and William F. Meacham, Nashville. The elections were for two-year terms beginning January 1, 1970.

* * * * *

OUTSTANDING PHYSICIAN-OF-THE-YEAR—DISTINGUISHED SERVICE AWARD . . . Dr. Carroll H. Long, Johnson City, was elected by the House of Delegates to receive the Outstanding Physician-of-the-Year Award for 1969 . . . Dr. C. Robert Clark, Chattanooga, was selected by the Board of Trustees to receive the Distinguished Service Award for his many contributions to medicine in the field of emergency medical service. These awards were presented at the President's Banquet on the evening of April 11.

RESOLUTIONS AND REPORTS—LEGISLATIVE ACTIVITIES . . . Adopted a report submitted by the Legislative Committee to approve a Uniform Anatomical Gift Act, and a proposal to allow persons under age 21 to seek and receive medical treatment for venereal disease without parental consent. RESOLUTIONS—MEDICO-LEGAL AND ETHICAL . . . Adopted a resolution stating that all county medical societies and medical staffs of hospitals are urged to hold at least one meeting each year for the purpose of discussing current legal problems relating to physicians and hospitals . . . Another stated that the House of Delegates of TMA approve as policy the guidelines on heart transplantation as adopted by the American Medical Association, such statements to become the policy of TMA. RESOLUTIONS—MEDICAL EDUCATION . . . Approved wherein the Committee on Continuing Medical Education stressed self-education as imperative in the promulgation of good medical practice and urged each member to become active in continuing education and self-examination . . . And further that the Committee develop a program whose function would be to act as liaison and catalyst to local medical societies and the medical staffs of community hospitals . . . Another resolution commended the University of Tennessee Medical College, Meharry, and Vanderbilt University Schools of Medicine on the quality of medical education in Tennessee and urged medical colleges to continually evaluate admission criteria and curriculum standards to the highest possible degree.

* * * * *

OTHER RESOLUTIONS . . . Approved that at the 1970 annual session, the House of Delegates will convene on the afternoon and evening prior to the opening of the TMA annual meeting with a session of the House in the afternoon, a break for dinner, and conclude after dinner . . . Adopted a resolution wherein the House of Delegates reaffirmed certain basic principles regarding the delivery of high quality medical care . . . Approved a resolution to increase TMA dues an additional $25 to become effective on January 1, 1970, bringing the annual dues to $80 per year . . . Referred to the Board, a resolution in opposition to governmental agencies' efforts to take over confidential records or data pertaining to patients and physicians . . . Reaffirmed TMA's previously expressed interest and recommendation that doctors of medicine be included on hospital boards . . . Another resolution urged all hospitals in Tennessee with five or more beds to seek accreditation by the Joint Commission on Accreditation of Hospitals . . . Approved a resolution to study the feasibility and report at the next annual session of the House for one additional trustee to the Board from each grand division of the state. RESOLUTIONS—SCIENTIFIC . . . Reaffirmed medicine's traditional opposition to the practice of medicine by lay corporations and to solicitation and for commercial advertising of the practice of medicine, and directed TMA's delegates to the American Medical Association to present a resolution at the annual meeting of AMA in July urging AMA to reconsider their action and rescind the policy adopted for such advertising in AMA publications . . . Approved a resolution expressing appreciation to those pathologists and radiologists in the state who have followed the policy of independent billing of their patients and urged compliance of all radiologists and pathologists who had not adopted this policy.

* * * * *

POLICY REVIEW IN THIS ISSUE . . . Complete abstracts of committee reports, amendments and resolutions are included in this issue of the Journal . . . The House approved the dates of April 9-10-11, 1970, for the annual meeting in Memphis with the first session of the Delegates to occur on the afternoon and evening of April 8.

Public Service

Communications Legislation

Hadley Williams, Public Service Director

GENERAL ASSEMBLY COMPLETES FIRST SESSION . . . The 86th Tennessee General Assembly adjourned May 9, 1969 after completing a 45-legislative day session. The assembly will reconvene January 13, 1970 for the remaining 45 days available to them. During the final days of the first session Medicaid became the prime topic of discussion. The final piece of business on the last day of the session was the approval of a joint conference committee report regarding Medicaid. The compromise bill will allow the program to begin July 1st if possible administratively. Uppermost in the minds of many legislators was the ultimate cost the program may require. Strong fiscal restraints were urged by several members of the Assembly and the legislation finally adopted reflects these sentiments. Tighter regulations regarding drugs was included. Also included was a requirement that all providers of services under the program as well as those State employees charged with the administration of the program must annually report financial interests held in any facility certified under the program such as hospitals, nursing homes, apothecaries, etc. Administration of the program remains under the Department of Public Health but the Department of Finance and Administration is now required to supervise and assist in the development and operation of the program as another means of keeping tight fiscal reins. The Assembly's own watchdog group, the Fiscal Review Committee, was charged with quarterly reporting of the program's expenditures, caseloads, utilization, staffing, etc. Also adopted as a compromise was a provision calling for administration of the program to be under the Department of Finance should HEW refuse to approve the proposed Tennessee program due to a conflict in the single State Agency requirements. The budget request for an appropriation of $11.3 million of state funds was approved for the fiscal year 1969-70 which will provide a total program in excess of $49 million when combined with Federal and Local matching funds.

* * * * *

CHIROPRACTORS BILL STYMIED . . . Legislation to equate chiropractors and podiatrists with physicians passed the House but failed to be reported out from the Senate committee to which it was referred. The bill would require insurance companies to reimburse chiropractors and podiatrists for their services on a parity with physicians under all health insurance contracts written in Tennessee. The proposal also requires full recognition and reimbursement under all health care programs provided at any level of government. The legislation remains in the Senate committee until the 1970 session at which time it may be reported out for floor action by the entire Senate.

NON-CITIZENS MAY NOW RECEIVE MEDICAL LICENSE . . . Legislation to allow graduates of Foreign medical schools to be granted medical licensure was also adopted by the General Assembly. The amended law requires Foreign graduates to have legally resided in the United States for at least two years and to successfully pass the Tennessee basic science exam. Reciprocity would not be granted to graduates of a Foreign medical school under the new law.

* * * * *

NEW YORK TO HOST JULY AMA CONVENTION . . . The 118th Annual Convention of the American Medical Association will be conducted in New York City, July 13 through 17. The Nation's largest city has been host to two AMA annual conventions in this decade — in 1961 and 1965 — and attendance at each exceeded 60,000. Four general scientific sessions are planned. They are Human Sexuality, Physical Fitness and Aging, Impact of Medical Education on Patient Care and Chronic Pulmonary Insufficiency and Air Pollution Problems. Each of the 22 scientific sections will also present a program. Much of the scientific activity of the convention will be in the Coliseum and New York Hilton Hotel. The House of Delegates of the AMA will meet at the Americana Hotel. Tennessee will be represented by four delegates — Drs. John H. Burkhart of Knoxville, Tom E. Nesbitt and W. O. Vaughan of Nashville and Bland W. Cannon of Memphis.

* * * * *

HARVARD SLATES NEW HEALTH PLAN . . . The Harvard Medical School has developed a new health insurance plan designed to pay all a patient's medical bills in the hospital as well as emphasizing prepaid preventive care. It is scheduled to begin operations this Fall on a voluntary basis through Blue Cross. Approximately 30,000 persons are expected to participate in the plan. Cost is being estimated at $50 a month per family. Services to be provided include a required annual physical examination, plus all x-ray, laboratory, diagnostic and other medical needs except drugs. Also covered will be the full cost of unlimited visits to a doctor selected by the participant from a panel of Harvard physicians, and the cost of home calls when necessary, home health services and nursing care. In the hospital, all medical expenses, including drugs, will be covered for up to 365 days for any one illness.

* * * * *

U.S. CHAMBER ASKS MEMBERSHIP TO DECIDE MEDICARE POLICY . . . A membership referendum will determine whether the National Chamber adopts a new policy declaration on Federal health insurance or retains its policy of opposition to the Federal Medicare program for the aged. Voting was completed last month. The announcement of the results will be forthcoming.

* * *

COMMUNITY HEALTH WEEK TO BE OBSERVED . . . The seventh annual observance of Community Health Week will be marked October 19-25, again affording medical societies and other members of the health team a splendid opportunity to work together in developing appropriate local public service programs in their communities. Each of Tennessee's 49 county medical societies are being urged to implement this excellent program by utilizing the kit of materials furnished by the AMA. Two timely themes will be featured this year—recruitment of health manpower and emergency medical identification. If requested, TMA will assist any county society in planning and developing an appropriate program.

TENNESSEE PRESS REFLECTS TMA ANNUAL MEETING

. . . examples of hundreds of articles clipped from Tennessee newspapers . . .

...geons Told Of ... Intern Concept

...NWAH K. SPARKES
... Staff Writer

...burg — Dr. H. William ..., chairman of the De... ...nt of Surgery at Vander... ...niversity's Medical Cen... ...aid here that the outmoded ...pt of medical ...ld be done awa... ...placed with a two ...gical residency b... ...quent specialization. ...The Vanderbilt ... ...the statement in ...

surgeon before he becomes spe... cialized in one narrow field." He said early specialization has been overdone in the me... profession.

Concent... VU

Dr. ...

Questions raised about ... at TMA meeting in Gatlinbu...

Pres... must ... much ... any me...

'Get Involved,' Doctors Told

...Y WILLIAM GREENBURG
...NNESSEAN Science Writer

...ATLINBURG—The Ameri... Medical Association must ...e that everyone in Ameri... ...ould have high quality ...l care at a reasonable ...ough... ...oposes govern... ...ogr... ...er...

Ambulance Data Withh...

GATLINBURG — A r... on ambulance service ir... state was withheld from ...nessee Medical Ass... ...terday because ... ...not approve... ...al pr...

AMA President Warns Of Government Takeo...

By BENWAH K. SPARKES
Staff Writer

Gatlinburg — The president of the American Medical Associa... tion warned the members of the Tennessee Medical Association here that if the ... in convention here that if the ... medical profession does not take ... the leadership in the nation's ... health care, the federal govern... ment will.

Dr. Dwight L. Wilbur, who is ... on the staff of the Stanford Uni... versity School of Medicine, ... spoke on "Let's Lead Rathe...

Rapid Changes

...bur traced ... ...medi...

...said the most importan... ...that has taken ple... ...tional comm... ...He said ...

Prescribing Caution Needed Cited for 'Pill'

By WILLIAM GREENBURG
TENNESSEAN Staff Correspondent

GATLINBURG — Prescribing the "pill" must be treated with as much care as prescribing any medication, a panel of doctors said yesterday.

"There is no magic to the pill," said Dr. Donald Gross, head of the department of obstetrics and gynecology at Vanderbilt and a member of the panel.

Medicaid bill ... minimum p... ...de care to ... ...65 who n... ...of ... ...end ... ...lo...

"WE ... creasing ... health ... commu... TMA's ... "We ... of the ... of the ... Wil... ...an...

...alo... ...prote... ...pleme... Tennes... year unt... Also, the... legislature ...caid legisla... ...ly.

The stateme... Medicaid was o... ...ber of statements ...ing sessi...

TMA Cites Eaststate Surgeon

...GATLINBURG (AP) — Dr. ... Carroll H. Long, Johnson City ... surgeon and a former medical ... was picked yester... ...of Delegates ...

Dr. Carroll H. Long
Former missionary

TMA Elects Nashville's Dr. Nesbitt

By BENWAH K. SPARKE...
Staff Writer

Gatlinburg—Dr. Tom E. ...t, Nashville urologist ser... ...speaker of the House of D... ...s during the current an... ...ting of the Tennessee M... ...Association, this afterr... ...named president-elect ...MA.

TMA Opposes Medicaid Delay

...WILLIAM GREENBURG
...EAN Science Writer

...G, Tenn. — ...al Asso... ...ses

...tive and public policy commit... ...tee of the state medical so... ...ciety, signed by Dr. O. Morse ... Kochtitzky of Nashville, said:

"THE REASONING of the ... supporters of the delay bill is ...ult to understand, in view ... ...that the savings ... one-time basis ... solution

Medical Auxiliary Takes Top Honors At State Meet

Woman's Auxiliary to the ... Bradley County Medical Asso... tion took top honors ... nessee Medical ... Friday and Satu... burg.

The group bro... of the top awards. ... the "Potter-Nicel... ment Bowl", for ac... auxiliaries of 30 to 2... And the AMAERF ... acquired for money ... the medical research ... ...succeeds Newell, ...ation came a...

...ward for the best ... the state and an ...best observance of ...ere also received. ...aylor is president ...here.

...state meeting ...Mmes. Robert ..., Marvin Bat... ...fer, William ..., Ivan Hum...

Boones Creek Wins TMA Health Project

GATLINBURG, April 3 (Special)—Boones Creek High School of Jonesboro has been named winner of the 16th annual Health Project Contest sponsored by the Tennessee Medical Association and the Woman's Auxiliary to TMA.

An award of $500 will be made



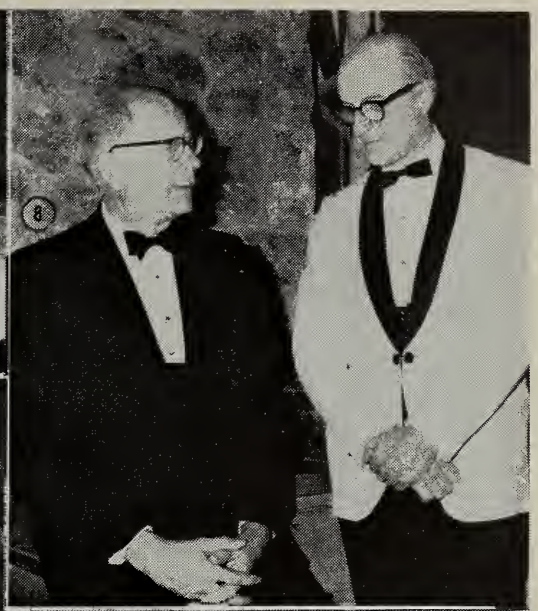
...MA PRESIDENT — Dr. Francis h... ...the gavel from Dr. Edwa... ...being installed as pr... ...succeeds Newell, ...

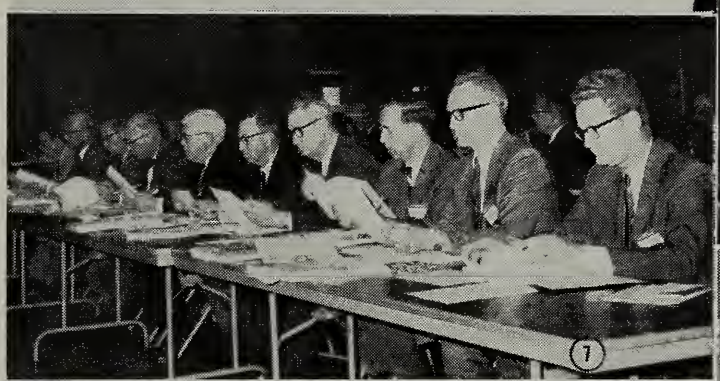
Annual Meeting Highlights

The Journal camera was on the scene in Gatlinburg and caught (1) Drs. Thomas F. Stevens and John Saffold both of Knoxville and William H. Edwards of Nashville at the registration desk. (2) Dr. Charles C. Trabue was on hand to staff the Regional Medical Program booth and explain his new activities as Middle Tennessee Area Coordinator. (3) Dr. David R. Pickens of Nashville purchased his IMPACT Breakfast ticket from Mrs. Jean Teague, Knoxville Auxiliary member. (4) Dr. J. Kelley Avery of Union City received information about the Southern Medical Association from Mrs. Martha Hooks of Birmingham. (5) Exhibitors were busy explaining their new products. (6) The House of Delegates was presided over by Dr. Tom E. Nesbitt of Nashville with the aid of Dr. R. L. DeSaussure of Memphis, vice-speaker, and Jack E. Ballentine, TMA Executive Director. (7) The Knoxville Academy of Medicine delegation hard at work. (8) Dr. Dwight L. Wilbur of San Francisco, President of the American Medical Association, was on hand to congratulate Dr. Carroll H. Long of Johnson City, TMA's Physician-of-the-Year. (9) Dr. Robert Chalfant of Nashville presented student representatives of Boones Creek High School with a check for $500 as first place prize in the 16th annual Health Project Contest. (10) Dr. C. Robert Clark of Chattanooga was honored with a Distinguished Service award presented by the Chairman of the TMA Board of Trustees, Dr. Oscar M. McCallum of Henderson. (11) Dr. Nesbitt presented Dr. Long with his award. (12) The last order of business for Dr. Edward T. Newell, Jr. of Chattanooga as president was to present the symbol of his office to the new TMA president, Dr. Francis H. Cole of Memphis.

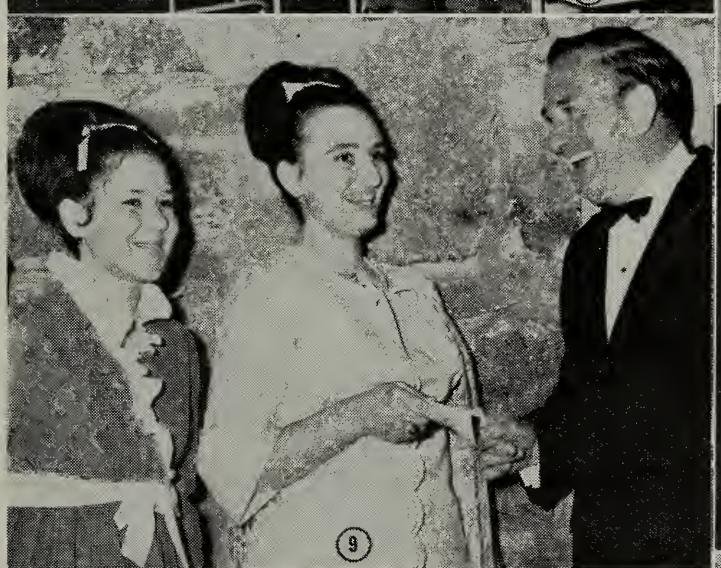



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President's Page



FRANCIS H. COLE

The Tennessee General Assembly has recently adjourned after an eventful session. This year was expected to be rather quiet as far as legislation of medical interest was concerned since the enabling act for Title XIX needed only a few technical amendments, and a great deal of administrative groundwork had been accomplished. However, as the session developed, medical bills seemed to appear with astonishing regularity. Our staff representatives in the legislature, Mr. Hadley Williams, Mr. Jack Ballentine, Mr. Charles Cornelius, and Mr. Mike Windham, were hard pressed to keep up with the flow of events.

A bill to elevate Chiropractic and Podiatry to equality with medicine in the health insurance field passed the House by an overwhelming majority and was kept in the Commerce Committee in the Senate by a margin of one vote. Several physician members of TMA in Nashville spent many hours at the Capitol in reference to this bill. Several other physicians from outside of Nashville made trips to the legislature, and contact doctors throughout the state called on their representatives back home on weekends. To all of these people, the physicians of Tennessee and the general public owe a debt of gratitude, since this bill did not appear in any way to be in the public interest.

A massive attack on Title XIX produced a great furor in the halls of the legislature, and certain amendments to the bill which would have made physician cooperation highly unlikely were passed by the House of Representatives in spite of testimony before a special Committee of the House by Doctors Morse Kochtitzky, Tom Nesbitt, and your President. A great deal of activity ensued on the local, state and national level and with leaders of both parties, so that a compromise was reached in the final hours of the session which does appear to leave the law in a form that should be helpful to the indigent sick of the state of Tennessee, and one that merits the cooperation of physicians in the state. The Board of Trustees and the Legislative Committee are presently studying the policy which we should adopt toward Medicaid participation and it may well be necessary to have a special meeting of the House of Delegates to implement any changes in our policy which may result from these studies.

After one month of intensive activity in this office, I am left with the strong impression that political activity by physicians is indispensable if we are to protect the public health. Most of us develop through training and experience a certain ability to care for the individual patient in a reasonably efficient fashion. Most of us would prefer to be left to this activity with as little interference as possible from extrinsic sources. However, at this time it is impossible to hope for continued existence without participation in legislative affairs. A small number of men produced a great amount of action and many hours of work on behalf of the medical profession and the public health in the last month. Most of the areas of contention were resolved in a favorable fashion, but the margin of victory was frightfully small. More physicians becoming more knowledgeable and spending more time will be required as big government increases its activities in the field of medicine.

Sincerely,

Francis H. Cole, M.D.

President

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JUNE, 1969

EDITORIAL

U.T.'s Physician Survey

In about mid-June the University of Tennessee College of Medicine will mail each physician in the state a questionnaire in the interest of continuing education. It consists of 17 pages of questions which supply identifying data and information about the respondents' activities and interests in continuing education. Questions then follow to explore the desires of the respondent in regard to types of courses which he finds most useful and methods of their presentation, reasons for neglecting continuing education, and specific professional needs. Another series of questions explores the need for aid from, and the use of medical schools and their faculties for consultant purposes.

The whole questionnaire is programmed to permit coding of answers and their retrieval from punch cards. The confidentiality of the individual questionnaire will be maintained. Combined data will be used in reporting findings.

In an Editorial in the December 1968 *Journal* attention was directed to the activities in continuing education of the AMA and state medical associations. The members of TMA were informed of its Committee on Continuing Education. An editorial in the February 1969 number of the *Journal* considered motivation toward continuing education. Back of it all lies the probability of recertification and/or relicensure to practice medicine, based on evidence that the practitioner at least has had a part in continuing education, hopefully thereby to avoid punitive and unrealistic relicensure by examination. Several state associations are evaluating the continuing education of their members and methods of involving the nonmotivated members in such activities. New York State has requirements for evidence of continuing education by general practitioners in order to participate in Title 19.

The TMA Committee on Continuing Education outlined its philosophy in a Resolution presented to the House of Delegates at the Gatlinburg meeting to gain approval for action based on its concepts. The Committee is now in a position to act.

One of the needs to be discussed at an early meeting of the Committee will be the accumulation of data by a questionnaire directed to all TMA members. A number of questionnaires have been developed by state associations across the land.

This editorial directs attention to the U. T. questionnaire as one that can gather much data of interest to the TMA Committee on Continuing Education. If the Committee were to reach a consensus on this, the membership might be spared another extensive questionnaire, provided that U. T. would find it possible to assist the Committee through the results of its questionnaire.

For example, if the members of the staff of a given hospital had each answered the questionnaire, and if that hospital wished to mount a program of continuing education, it would appear that the punch cards at the U. T. College of Medicine could offer a profile of the staff *as a group* in terms of needs and preferred methods of filling these needs. In such an instance a great preliminary step would have been taken in developing a program of continuing education for that hos-



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Precautions: Doses in excess of six tablets or six tablespoons of liquid daily may produce minor side actions such as dryness of the mouth or blurred vision.

Warning: Use of any drug in pregnancy, lactation or in women of child-bearing age requires that the potential benefit of the drug be weighed against its possible hazards to the mother and child. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Side Effects: Possible side actions include: tachycardia, palpitation, urinary hesitancy or retention, dry mouth, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, and rarely, urticaria and other dermatoses. Infrequently, an elderly patient may experience some degree of mental confusion.

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pital. It is conceivable that the Committee on Continuing Education might find need for an additional brief questionnaire tailored to a given situation.

This editorial thus urges that each TMA member answers the questionnaire and returns it *promptly* to Memphis, with an eye to the possible use of the accumulated data by the Committee on Continuing Education.

R. H. K.

IN MEMORIAM

Bottomley, V. Robert, Greeneville. Died April 18, 1969, Age 68. Graduate of University of Tennessee College of Medicine, 1947. Member of Greene County Medical Society.

Reeder, William H., Jr., Knoxville. Died May 7, 1969, Age 46. Graduate of University of Tennessee College of Medicine, 1947. Member of Knoxville Academy of Medicine.

Reichman, Sidney C., Nashville. Died May 21, 1969, Age 56. Graduate of University of Virginia School of Medicine, 1944. Member of Nashville Academy of Medicine.

PROGRAMS AND NEWS OF MEDICAL SOCIETIES



New Members

The Journal takes the opportunity to welcome these new Tennessee Medical Association members.

BLOUNT COUNTY MEDICAL SOCIETY
R. S. Bain, M.D., Maryville
S. Hutson Hay, M.D., Alcoa
M. D. Peterson, M.D., Maryville

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY
Roy William Kirchberg, Jr., M.D., Chattanooga
James P. Pappas, M.D., Chattanooga

KNOXVILLE ACADEMY OF MEDICINE
Lynn F. Blake, M.D., Knoxville
J. MacDonald Burkhart, M.D., Knoxville
Jack Ford, M.D., Knoxville
Robert E. Knowling, M.D., Knoxville
James W. Wall, M.D., Knoxville

MEMPHIS & SHELBY COUNTY MEDICAL SOCIETY
J. L. Claybrook, M.D., Memphis
R. G. Farmer, M.D., Memphis
B. I. Friedman, M.D., Memphis
H. T. Grizzard, M.D., Memphis
J. R. Harp, M.D., Memphis
Huey T. Holt, M.D., Memphis
E. J. Justis, Jr., M.D., Memphis
T. D. Sisk, M.D., Memphis
A. J. Summar, M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE
Douglas W. Kendall, M.D., Madison
Robert V. Russell, M.D., Nashville
Richard V. Staab, M.D., Nashville

NORTHWEST TENNESSEE ACADEMY OF MEDICINE
J. R. Drumwright, M.D., Ripley

Roane-Anderson County Medical Society

Captain Newton W. Allebach, Internist at the Naval Aerospace Medical Institute, Pensacola, Florida, was guest speaker at the meeting of the Society on April 29th. Dr. Allebach discussed "Development of some of the Research Programs of the Aerospace Institute—Such as Advances in Cardiology, Exercise and Vertigo. Members of the Society also heard a report from the delegates to the annual meeting of the Tennessee Medical Association, held in Gatlinburg, April 10-12.

On May 27th, the Society held a meeting which was open to the public in the Jefferson Junior High School Auditorium. A panel discussion on "Drug Abuse" was moderated by Dr. James T. Gillespie. Panelists were Drs. T. Guy Fortney, Frank Genello, and Charles Gurney. A question and answer session followed the discussion.

Memphis-Shelby County Medical Society

The Society met in regular session in the auditorium of the Institute of Pathology, University of Tennessee, on May 6th. The program consisted of a panel discussion on "Drug Abuse Program at University of Tennessee College of Pharmacy", moderated by S. B. Feurt, Ph.D., Dean of the U. T. College of Pharmacy.

On June 3rd, a joint meeting of the Medi-

cal Society and the Memphis-Shelby County Bar Association was held at the Holiday Inn Rivermont. A skit on "Interprofessional Code" was presented by physicians and attorneys.

Sullivan-Johnson County Medical Society

Dr. G. Slaughter Fitz-Hugh, professor and chairman of the department of otolaryngology at the University of Virginia School of Medicine, and chief otolaryngologist at the University of Virginia Hospital, addressed the Sullivan-Johnson County Medical Society at its meeting on April 9th. The meeting was held in the new meeting room facilities at Tri-City Airport.

Knoxville Academy of Medicine

The program for the meeting of the Academy on May 13th was sponsored by the Mental Health Committee of the Tennessee Medical Association, and arranged by Drs. John Wolaver and William O. Miller. The speaker was Dr. John D. Griffith, assistant professor, department of psychiatry, Vanderbilt University, on the subject "Drug Abuse and Misuse".

A Clinic on "Hypersensitivity Reactions to Unlabeled Oral Food and Drug Contents" was given by Drs. Robert Hornsby and Fred Hodge.

NATIONAL NEWS

The Month In Washington
(From Washington Office, AMA)

Health, Education and Welfare plans to impose Blue Shield schedules for physicians under Medicaid and to limit payments to hospitals under Medicaid and Medicare drew strong responses from the American Medical Association and the American Hospital Association.

Dr. Dwight L. Wilbur, president of the AMA, urged in a letter to Robert H. Finch, HEW Secretary, that all segments of the health care field be consulted in effecting economies in government-paid health services. "The American Medical Association is eager to make available to your office the composite experience and judgment of the nation's physicians, who are the principal providers of health care to all the people," Dr. Wilbur said. "The needs and problems of patients in all walks of life, at all income levels, come to their attention, in composite, more than a billion times a year.

"It has always been a principle of both the humanity and the professional code of the physician that no one shall ever be denied quality health care because of his inability to pay. The present concern is how this universal care can best be provided within a viable economic system and in the face of burgeoning demand for medical manpower, services, and facilities. . . .

"The knowledge and judgment of the nation's physicians—as well as of the prepayment plans, health insurance industry, hospitals, the allied health professions, the actuaries and others—must be enlisted in your battle against the health-care portion of the inflation problem."

Dr. Wilbur wrote Finch following the HEW announcement that federal spending on the Medicaid-Medicare programs would be trimmed by $328 million through imposing Medicaid fee schedules based on prevailing Blue Shield rates, limiting mental illness benefits under Medicaid and cutting down hospital overhead allowances in Medicaid and Medicare.

"It is important to recognize that there are many variables in the circumstances of payment for medical and hospital services," Dr. Wilbur said. "Local needs and resources, the educational and motivational levels of the people, the economic conditions of the state and the community are among the reasons for the differences exhibited by the payment patterns of the Blue Shield Plans and health-insurance companies.

"These circumstances must be the foundation for any policies involving cost and payments. No universal pattern—no matter how many variations it may try to provide—can be imposed on the thousands of localities without wreaking havoc and probably increasing inefficiency and costs."

Concerning the imposition of Blue Shield rates as fee schedules under Medicaid, Dr. Wilbur warned in an address before the American Society of International Medicine in Chicago that a later step "might be that of physicians in groups on salary and abandonment of the fee-for-service principle".

He said that physicians, in combatting such government efforts, must accept the major responsibility of keeping fees as moderate as possible.

The American Hospital Association protested in a letter to President Nixon against removal of the two percent overhead allowance for hospitals. Officially representing the AHA, Ray R. Eppert, Detroit, Mich., hospital trustee, said in a memorandum accompanying the letter to Nixon: "The recent announcement of a reduction in Medicare reimbursement poses a serious threat to institutional integrity and, therefore, to the ability of hospitals to serve the sick and injured of this nation. Hospitals have been repeatedly assured at the highest levels of government that Medicare changes would not be made without consultation with their designated representative, the American Hospital Association.

"The AHA has tried repeatedly but unsuccessfully to meet with Secretary Finch. It is incredible that the federal government would propose, without any consultation, removal of the two percent allowance which is a proper component of reasonable costs guaranteed under the law as passed by the Congress.

"The department apparently deemed it unnecessary to consult with the hospital field, and, as far as can be determined, made no serious study of the effect of the proposed reduction on hospitals. Payment of nothing but raw costs will lead . . . to the serious under-financing of our hospitals."

★

The Joint Commission on Mental Health of Children is recommending a broad program aimed at bettering the health of the nation's children and youths at an estimated cost of $6 billion to $10 billion a year. The Commission recently disclosed its recommendations to the annual meeting of the American Psychiatric Association in advance of its report to Congress. The 54-member commission—which has completed a three-year, $1.5 million study—was established by Congress in 1965.

Sen. Abraham A. Ribicoff (D., Conn.), who introduced the legislation to set up the committee, said he would promptly introduce legislation to carry out the commission's recommendations.

The recommendations included national health insurance for persons up to 21 or 25 years old; family planning and birth control; prenatal care; pediatric care for children up to age of three, and physical and mental health services for older children.

Other recommendations:

—Federal funding for about 100 child development councils to help guide families through the confusion of Government agencies in order to insure diagnostic, treatment and preventive services for children.

—Appointment of a Presidential council of advisers on children and youth, similar in position and prestige to the Council of Economic Advisers.

—Establishment of state commissions and local authorities on child care.

—Federal financing of about 10 evaluation centers to consider the working of the child development councils.

—Publicly supported day care available for all children.

—Federal funds for training child health and welfare personnel.

—Tax incentives to induce people to service in slum areas.

Dr. Reginald S. Louri, Washington, D. C., psychiatrist, is chairman of the joint commission.

President Nixon, in a message to Congress on February 19th said: "So crucial is the matter of early growth that we must make a national commitment to providing all American children an opportunity for healthful and stimulating development covering the first five years of life."

MEDICAL NEWS IN TENNESSEE

Middle Tennessee Medical Association

The 149th Semiannual Meeting of the Middle Tennessee Medical Association was held in Springfield on May 15. Program participants and their subjects were: Dr. Halden W. Hooper, Gallatin—"The Use of Rhogam in RH Negative Mothers"; Maj. Marvin Winell, M.C., U. S. Army, Fort Campbell, Kentucky—"Early Recognition and Treatment of Stress Fracture"; Dr. Alan L. Graber, Nashville—"A Systematic

Approach to Diabetic Retinopathy"; Dr. V. H. Crowder, Jr., Lawrenceburg—"Carcinoma of Colon and Rectum Complicated by Perforation"; Dr. Wm. G. Kennon, Nashville—"It is Not Sinus"; Dr. Anderson Spickard, Nashville—"Hospital Acquired Infections in a Community Hospital"; Dr. J. Sumpter Anderson, Nashville—"Management of Ventilatory Problems in Surgical Patients"; Dr. Arthur G. Bond, Nashville—"Mechanisms of Head Injury"; Capt. Warren K. McNabney, U. S. Army, Fort Campbell, Kentucky—"Empyema of the Gall Bladder in Infancy"; Dr. Fred Goldner, Jr., Nashville—"Hypertension, Evaluation and Office Management"; Dr. Noel Hunt, Nashville—"The Use of Pacemakers in the Diagnosis and Treatment of Tachyarrhythmias."

A movie on Alcoholism, sponsored by Pfizer Laboratories, was presented by Dr. C. F. Mynatt, Supt. of Eastern State Psychiatric Hospital, Knoxville; and Dr. George R. Burrus, Nashville, presented a movie on "Myocardial Revascularization." A symposium on "Workmen's Compensation" was moderated by Dr. Cleo M. Miller, Nashville. Panelists were Mr. John W. Nolan, III, Attorney, Nashville, and Mr. Edward Jenkins, Travelers Insurance Company, Nashville.

Dr. Mack Green, Clarksville, was presented the Middle Tennessee Physician of the Year Award.

The meeting ended with a social hour and presidential banquet at the Springfield Country Club.

Mental Health Commissioner Named by Governor

Dr. Frank H. Luton, who has served seven years as clinical director of Central State Psychiatric Hospital, has been named by the Governor to serve as Commissioner of Mental Health for the State of Tennessee. Dr. Luton succeeds Dr. Nat T. Winston, Jr. who resigned as Commissioner to accept a post with a private nationwide mental health organization. The appointment became effective June 1st.

Director of Tennessee Mid-South RMP Named

Dr. Paul E. Teschan of Walter Reed General Hospital has been named Director of the Tennessee Mid-South Regional Medical Program by the Dean of Vanderbilt University School of Medicine. Dr. Teschan will officially assume his duties as director of the program August 1st. He will also be an associate professor of medicine and an associate professor in the division of urology in the University's department of surgery.

Symposium On Chronic Pulmonary Diseases

The annual symposium on chronic pulmonary diseases was held May 14-15 at Erlanger Hospital, Chattanooga. Program speakers included three nationally-known medical authorities: Dr. John S. Chapman, professor of internal medicine and assistant dean of postgraduate education at the University of Texas Southwestern Medical School, Dallas; Dr. Roy F. Goddard, director of pediatric research at the Lovelace Foundation for Medical Education and Research, Albuquerque, N. M.; and Dr. Harold C. Muchmore, chief of the tuberculosis and infectious disease section and associate professor of medicine and microbiology at the University of Oklahoma School of Medicine.

Dr. Goddard, author of a number of books on respiratory diseases in children, led a discussion of "Diagnosis and Management of Asthma in Children." Dr. Chapman's topic was "Farmers' Lung and Occupational Exposure," and Dr. Muchmore discussed "Pneumonia as Seen Today."

Vanderbilt University School of Medicine

A new department is being established in the Vanderbilt University Medical School, a department of neurology. The announcement was made by Dr. Randolph Batson, Director of Medical Affairs.

Dr. Gerald Fenichel, associate neurologist of the District of Columbia Children's Hospital, has been selected to organize and to head the new unit. Dr. Fenichel also serves as assistant professor of neurology at George Washington University Medical School, consultant in neurology to the Washington Hospital Center and consultant in pediatric neurology to Andrews Air Force Base. He received the M.D. degree from Yale University Medical School in 1959 and took postgraduate training at Strong Memorial-Roch-

ester Municipal, the National Institutes of Neurological Diseases and Blindness and Yale Medical School, where he was a Fellow in neurology.

Dr. Fenichel has been certified by the American Board of Psychiatry and Neurology and is a member of the American Academy of Neurology and the New York Academy of Science. He will assume his new duties at Vanderbilt on July 1st.

★

A $500,000 grant from The Commonwealth Fund has been received by the medical school for a major expansion of facilities. Vanderbilt originally was selected for the grant in 1966. Payment of funds, however, was based upon the condition that the University obtain additional monies needed to finance the project. A recent $1,352,000 grant from the National Institutes of Health enabled Vanderbilt to reach this goal, and, thereby, fulfill the condition.

The Commonwealth grant was made "in recognition of the fine progress made by the medical school in recent years, and of its increasingly important leadership role in its region and in the nation."

Vanderbilt's research, training and clinical capabilities will be greatly enhanced due to the new facilities. Construction is slated to begin at an early date.

★

Recent promotions have been announced by Dean Batson: to Professor, Doctors W. L. Caldwell, Radiology; John E. Chapman, Medical Administration; W. G. Gobbel, Jr., Surgery; John A. Oates, Pharmacology and Medicine; Jane H. Park, Physiology; and John L. Sawyers, Surgery; to Clinical Professor, Doctors Otto Billig, Psychiatry; George W. Bounds, Ophthalmology; and Frank C. Womack, Jr., Pathology; to Associate Professor, Doctors J. S. Andrews, Jr., Ophthalmology; Alvin M. Burt III, Anatomy; G. R. Davenport, Anatomy; J. V. Dingell, Pharmacology; Tetsuro Kono, Physiology; Robert A. Neal, Biochemistry; David M. Regen, Physiology; Vernon H. Reynolds, Surgery; and to Associate Clinical Professor: Doctors Edmund W. Benz, Surgery; Herschel A. Graves, Jr., Surgery; J. K. Jacobs, Surgery; G. Allen Lawrence, Ophthalmology; Malcolm R. Lewis, Surgery, and Robert H. Tosh, Obstetrics and Gynecology.

A medical student education fund was established by Alpha Kappa Kappa Medical Fraternity. Members of the Chi Alpha Welfare Association of the Chi chapter of Alpha Kappa Kappa made the presentation to Vanderbilt on March 11 in Chancellor Alexander Heard's office. Representing AKK were the doctors who make up the Chi chapter's Alumni Board of Directors: Doctors Sydney McClellan, Joe Strayhorn, Thomas Weaver, Harrison Shull, Rollin Daniel and William Meacham. Alpha Kappa Kappa contributed $34,500 to establish the fund. The annual income from the fund will be matched each year by the University, thereby doubling the amount available for student aid.

St. Thomas Hospital

Dr. Robert F. Ingram, Administrator of Children's Hospital, Montreal, will join the St. Thomas Staff as Director of Medical Affairs on July 1.

The Nashville Jaycees named Sister John Gabriel, "Nashville's Outstanding Woman of the Year" for her leadership of St. Thomas Hospital and contributions to the community.

Recently installed officers of the Medical Staff are:—Doctors E. L. Williams, President; Robert M. Roy, President-Elect, and Fred Rowe, Secretary-Treasurer. Chiefs of Services are: Doctors J. E. Anderson, Medicine; Scott Bayer, Ob-Gyn; W. B. Wadlington, Pediatrics, and B. F. Byrd, Jr., Surgery.

University of Tennessee College of Medicine

Honors and Awards—Dr. Roland H. Alden, dean of the Graduate School-Medical Sciences at the U. T. Medical Units, has been installed as president of the American Association of Anatomists. . . . Dr. James W. Pate, chief of thoracic surgery, was reelected president of the Directors of Training in Thoracic Surgery at the organization's recent meeting with the American Association for Thoracic Surgery. . . . Dr. Ralph Braund, clinical associate professor of surgery, was elected president of the Society for Surgery of the Head and Neck during the annual meeting in Mexico City. . . . Dr. Homer F. Marsh, chancellor of the Med-

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Contraindications: The drug is contraindicated in patients hypersensitive to its components.
Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).
Precautions: Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months.
Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur.
Usual Adult Dosage: 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.
Supplied: Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin.

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ical Units, has been elected to membership in the Mid-South Medical Center Council. . . . Dean Maston K. Callison, College of Medicine, has accepted an invitation to continue serving as a consultant to the Division of Physician Manpower of the Bureau of Health Professions, Education and Manpower Training, HEW. . . . Dr. Charles E. Kossmann, chief of circulatory diseases, has been appointed chairman of the Southern Regional Research Review and Advisory Committee of the American Heart Association. He also has assumed chairmanship of an ad hoc panel of the National Heart Institute on nomenclature and criteria for diagnosis of atherosclerotic coronary artery diseases.

Participating Faculty—Chancellor Homer F. Marsh was guest speaker May 13 at the meeting of the Mississippi Medical Association in Bioloxi. . . . Dr. Joseph H. Miller, clinical instructor in neurosurgery, served as visiting professor of neurosurgery at the University of Mississippi Medical Center, Jackson, May 25-31. . . . Dr. Sam H. Sanders, professor and head of the department of otolaryngology, participated as a member of the faculty for an advanced seminar on facial plastic surgery, held in Mt. Sinai Hospital, New York City, May 3-12. The course was sponsored by the American Academy of Facial Plastic and Reconstructive Surgery.

★

Dr. Fernand Orban, Professor of Surgery at the University of Liege, Belgium, spent the week of May 26 visiting the Departments of Surgery and Orthopedics while in this country as a visiting speaker. Professor Orban is an internationally known surgeon especially interested in trauma. He has previously been awarded honorary membership in the Royal College of Surgeons of England and in the American College of Surgeons.

Dr. George Hallenbeck, Professor of Surgery at the University of Alabama and previously Head of Surgery at the Mayo Clinic, was a visiting Professor of Surgery on May 28. Dr. Hallenbeck participated in rounds and visited the Experimental Surgical Laboratories.

Tennessee Biological Industries, Inc.

A Center in Nashville has been established for the collection of plasma that contains the antibody from which (D)-immune globulin is made.

In informing you of this activity, it is felt that this may help you answer possible future questions from your associates, patients, and the general public.

Possible plasma donors suspected of having a high antibody titer as a result of sensitization from pregnancies or transfusions will be sought. When seemingly suitable donors are located, they will be checked for the specificity and avidity of their antibody. Although it is difficult to find qualified donors, those who are accepted perform a valuable public service and are reimbursed for this service.

The acceptable donors are put on a regular plasmaphoresis program which, as you well know, has no ill effects on them. Plasma is withdrawn, and the red blood cells are promptly returned to the donor. A pre-donation physical and history will be taken by their local physician for which the organization will pay. The donor's total protein, hemoglobin, and liver function will be regularly checked.

All the rules and regulations of the American Association of Blood Banks and the National Institutes of Health will be followed.

This program in no way will interfere with or deplete the Red Cross Voluntary whole blood collection. If anything, it is complementary to it, for we will be needing only a relatively small group of selective donors who are not qualified for the Red Cross program.

This endeavor has been cleared by the Board of the Nashville Academy of Medicine and the officials of the local Red Cross Blood program.

If at any time we can be of service to you, or if there are any questions, please call on us. *John M. Flexner, M.D., and Robert C. Hartmann, M.D., Consultants.*

PERSONAL NEWS

Dr. Norma B. Walker, Knoxville, has been appointed to the U. S. Defense Department's Advisory Committee on Women in the Services. The appointment was made by Defense Secretary Melvin Laird.

Dr. Thomas W. Johnson, formerly of Dyersburg, has joined the staff of the American Academy of General Practice as Field Secretary of the Division of Education. In his new post, Dr. Johnson will work with medical schools and teaching hospitals in setting up undergraduate and graduate (residency) programs in the new specialty of Family Practice. In recognition of his work in medicine in his state, Dr. Johnson was chosen General Practitioner of the Year by the Congress

of Delegates of the Tennessee Academy of General Practice in 1968.

Dr. I. Frank Tullis, chief of clinical research center at William F. Bowld Hospital, was a guest speaker at a meeting of the Memphis District Dietetic Association, April 15th.

Dr. Richard France, Nashville, received an AMA plaque recognizing his voluntary medical service in Viet Nam, November-December, 1968.

Dr. Henry Brackin, Jr., Nashville, has been named president of the Tennessee District Branch of American Psychiatric Association.

Dr. Walter Griffey, Paris, was named president-elect of the West Tennessee Heart Association at the organization's annual meeting. He will take office July, 1970, succeeding **Dr. Edward F. Crocker,** Jackson, installed as president at the recent meeting. **Dr. Harold R. Yarbro,** Jackson, was named first vice-president; and the following physicians were named to the Executive Committee—**Dr. William B. Acree,** Ridgely; **Dr. Robert B. Mandle,** Jackson, and **Dr. George B. Wyatt,** Jackson.

Dr. F. Tremaine Billings, Nashville, was elected President, after serving as Secretary-Treasurer for 8 years, of the American Clinical and Climatological Association, the oldest society of internists in the country.

Dr. Harrison J. Shull, Nashville, has been chosen to serve a three-year term on the Board of Regents of the American College of Physicians.

Drs. Daniel F. Beals, J. C. Hathaway, and **Amos Chernoff,** Knoxville, were program participants at the 21st annual meeting of the Tennessee Society of Medical Technologists, May 8-10.

Dr. Blair D. Erb, Jackson, has been named medical advisor to the Madison County Chapter of the Arthritis Foundation.

Dr. John M. Bryan, formerly of Murfreesboro, has announced partnership with **Dr. C. A. Kyle** in the practice of urology at 90 Broad St., S.W., Cleveland, Tennessee.

Dr. John B. Youmans, Franklin, has been named a Master by the American College of Physicians.

Dr. James Willett, Elizabethton, has resigned as director of the Carter-Unicoi-Johnson Health District to take the position of superintendent of the Greene Valley Hospital and School, a state facility for the mentally retarded at Greeneville.

Dr. Harold C. Dennison, Jr., Nashville, announces the relocation of his office to Doctor's Pavilion, Suite 203, 1916 Patterson Street.

Dr. J. S. Butterworth, Camden, and **Dr. John Burch,** Nashville, were recently elected for Fellowship in the Southeastern Surgical Congress.

Dr. Frank Luton, Nashville, has been appointed Commissioner of Mental Health for Tennessee, succeeding **Dr. Nat T. Winston, Jr.,** who resigned to accept the presidency of the American Psychiatric Hospitals, Inc.

The University of Tennessee has announced the appointment of **Dr. Lewis F. Preston,** chief of pediatrics at Oak Ridge Hospital, as a member of its Student Health Services staff.

Inducted as Fellows of the American College of Physicians were: **Doctors William T. Nunes** of Donelson, **Richard B. Perry** of Johnson City, and **Bruce C. Sinclair-Smith** of Nashville. Elected to Associateship were: **Doctors Paul H. Barnett, John M. Flexner, Thomas B. Haltom, Robert G. Kiger, Lonnie C. McKee** and **Harry L. Page,** all of Nashville.

Dr. Robert C. Hartmann, Nashville, has been elected to membership of the Association of American Physicians. Other members from Tennessee are Dr. Gene Stollerman of Memphis, and Drs. Billings, Christi, Darby, Kampmeier, Liddle, Oates, Newman and Youmans of Nashville.

Drs. Cyrus E. Kendall, Douglas W. Kendall and **Thomas C. Littlejohn,** Madison, have opened the Mid-South Bio-Medical Laboratories for the practice of pathology.

BOOK REVIEW

SCHOOL HEALTH SERVICES. Editor Charles C. Wilson, M.D., Yale University. Second edition, 390 pages. National Education Association of the U. S., Washington, D. C. Price $5.00.

This book presents the kind of health services essential in modern educational programs. It deals principally with children of the precollege years. It is perhaps a little bit dated; for example, several new immunizing agents have become available since the last printing of the book in 1965. These include mumps and measles and shortly it is hoped Rubella. Very little is said about sex education. It is very general in its approach and is the kind of a book which would be most valuable for one interested in health education or planning health services for a school health system. References are extensive and quite good.

HEALTH EDUCATION. Edited by Bernice R. Moss, Warren H. Southworth and John Lester Reichert, M.D., Chicago. Fifth edition, reprinted 1967. 408 pages. Price $2.75 (paper bound) $5.00 (cloth)

This book is a very good outline of the content of health education for children beginning with preschoolers and going on up to high school.

It covers all of the important problems in health education including sex education, the use of drugs, use of tobacco, accidents, family life, and emotional factors of health. The references are extensive and the book should serve as a valuable source for teachers, both those involved in health education itself as well as the classroom teacher.

It is simple, brief, and easy to understand.

ANNOUNCEMENTS

Calendar of Meetings, 1969

National

July 12-13	Society for Surgery of the Alimentary Tract, Barbizon Plaza, New York
July 12-13	Society for Vascular Surgery, New York
July 13-17	American Medical Association, Americana, New York
Aug. 10-15	American Congress of Rehabilitation Medicine, Palmer House, Chicago
Aug. 21-22	AMA Communications Institute, Drake Hotel, Chicago
Sept. 2-6	International Tuberculosis Conference, Waldorf Astoria Hotel, New York
Sept. 4-6	American Association of Obstetricians and Gynecologists (Annual Meeting), The Homestead, Hot Springs, Va.
Sept. 13-19	American Electroencephalographic Society, El Cortez Hotel, San Diego, California
Sept. 14-20	American Society of Clinical Pathologists, Palmer House, Chicago
Sept. 14-20	College of American Pathologists, Palmer House, Chicago
Sept. 14-20	International Congress of Electroencephalography and Clinical Neurophysiology, El Cortez Hotel, San Diego, Calif.
Sept. 16-20	Congress of Neurological Surgeons, Sheraton-Boston Hotel, Boston
Sept. 21-27	World Congresses of Neurological Sciences (9th International Congress of Neurology and 4th International Congress of Neurological Surgery), New York Hilton, New York.
Sept. 26-Oct. 3	American Academy of General Practice, Philadelphia
Sept. 30-Oct. 3	American Roentgen Ray Society, Washington-Hilton, Washington, D. C.
Nov. 6-8	American Society of Cytology, Palmer House, Chicago
Nov. 10-13	Southern Medical Association, Atlanta, Ga.
Nov. 10-14	American College of Preventive Medicine, Philadelphia
Nov. 13-15	American Thyroid Association, Drake Hotel, Chicago
Nov. 13-15	Southern Thoracic Surgical Association, Mayflower Hotel, Washington, D. C.
Nov. 13-18	American Heart Association, Memorial Auditorium, Dallas
Nov. 19-22	Western Surgical Association, Statler Hilton Hotel, Dallas
Nov. 30-Dec. 3	American Medical Association (Clinical Convention) Denver

Training Course on Emergency Care To Be Held in Chattanooga

A four-day training course on emergency care and transportation of sick and injured persons will be held in Chattanooga, November 27-30, at the Read House. Sponsored by the American Academy of Orthopaedic Surgeons, the course is designed for ambulance attendants, nurses, volunteer rescue squads, safety engineers, policemen, firemen, and others who work with persons requiring emergency attention.

Introduced in Chattanooga last year, the comprehensive training meeting was attended by rescue and health experts from Chattanooga and 44 other cities in 12 states. The lectures and work practice sessions will be given in cooperation with the Chattanooga-Hamilton County Medical Society, Chattanooga-Hamilton County Rescue Squad, and Chattanooga Area Council on Emergency Medical Services.

Directing the comprehensive training course is Dr. C. Robert Clark, Chattanooga orthopaedic surgeon and Medical Director, Chattanooga-Hamilton County Rescue Service. To furnish instruction, physicians and others will speak and demonstrate on a wide variety of emergency medical situations. Traffic control at the accident scene, extrication from crushed autos, techniques of lifting and carrying, and patient comfort en route to the hospital are among the procedures taught in lectures and work practice sessions. For information and registration forms: write to C. Robert Clark, M.D., 210 Medical Arts Building, Chattanooga, 37402.

Southern Medical Association

The 63rd Annual Meeting of the Southern Medical Association will be held in Atlanta, Ga., November 10-13. You are invited to participate in this meeting in any of the following ways: present a paper before the Section of your choice, or discuss a paper; participate in a panel discussion; present a scientific exhibit.

Papers: Submit to the Secretary the title of your paper and a brief abstract. Presentation of papers is limited to 15 minutes and manuscripts must be turned in at the meeting for possible publication in the *Southern Medical Journal.* You will be notified the decision of the Program Committee by the Secretary.

Discussants and Panels: If you are interested in serving as a Discussant for a paper or as a member of a Panel, notify the Secretary of your Section, giving him an idea of the subjects in which you are primarily interested.



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Scientific Exhibits: If you wish to present a Scientific Exhibit, you may notify the Section Secretary or write directly to the Southern Medical Association, 2601 Highland Avenue, Birmingham, Alabama, 35205, and an application for Scientific Exhibit Space will be forwarded to you.

The Secretaries of the 21 Sections are responsible for the Section programs. If you wish to participate, please contact the Secretary of the appropriate Section at your earliest convenience.

Congress on Occupational Health

The 29th Annual AMA Congress on Occupational Health will be held September 15-16, at Stouffer's Riverfront Inn in St. Louis, Missouri. Prior to the Congress, representatives of state and county Occupational Health Committees are invited to meet informally with the AMA Council on Occupational Health. This meeting, Sunday morning, September 14, is designed to allow for a free exchange of ideas between state and county representatives and the AMA Council. Program and additional information may be obtained from: Council on Occupational Health, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

Medicine and Religion

A symposium on medicine and religion entitled "Dialogue and Dilemma," will be held at the University of North Carolina School of Medicine in Chapel Hill Monday and Tuesday, September 8 and 9. This will be the second program bringing clergymen and physicians together for joint discussion of problems of mutual concern, and is sponsored by the Committee on Medicine and Religion of the North Carolina State Medical Society, the School of Medicine and the Department of Medicine and Religion of the American Medical Association. The program will include nationally known speakers, both physicians and clergymen, and will provide opportunity for informal discussions in small groups.

Interested clergymen and physicians are cordially invited, and it is particularly hoped to have "teams" of physicians and clergymen from the same community. Detailed programs and information will be available around July 1st. Further information may be secured from: *Office of Continuation Education. U. N. C. School of Medicine, Chapel Hill, North Carolina 27514.*

* * *

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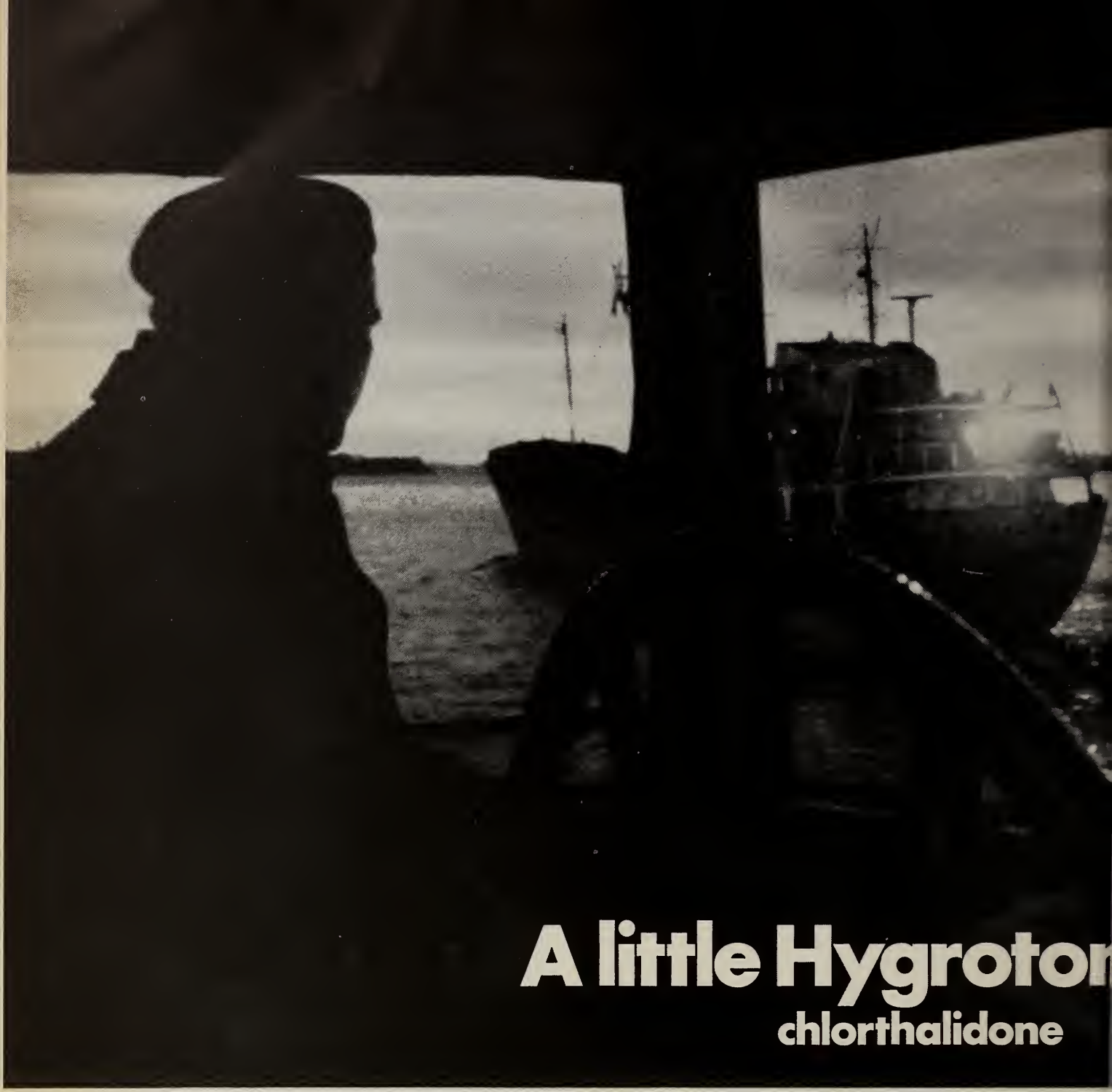
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525 Bland St., Bluefield, W. Va.
David M. Wayne, M.D.

Beckley Mental Health Center
109 E. Main Street, Beckley, W. Va.
W. E. Wilkinson, M.D.

Mental Health Clinic
Professional Building, Wise, Va.
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THE VIEWING BOX

The Challenge to Medicine—The Solo Physician's Response

By Michael J. Halberstam, M.D., Washington, D.C.

We all live with our private myths, and this is probably inevitable and desirable, but it is not necessary that we make others live by *our* illusions. I believe that my work as a physician is effective and that it is even more effective because I practice by myself—and both these may be myths—but I do not require of my profession that it live by my beliefs.

Some may believe that American medicine is the best in the world and others that it is the 16th best, but these are both myths of a sort—it is hardly inspiring to see government officials inflating our infant mortality statistics and medical officials minimizing them, when what they both should be doing is analyzing them—together. No matter how good American medicine is, what is important is that we all know it can be improved. And so I note with some relief the decreasing frequency with which the American Medical Association invokes the "sacred doctor-patient relationship," the sanctity of which was often lost upon people who could not find or pay a doctor when they needed one.

If organized medicine can lay aside some of its sacred myths—and I think it should —might it be possible for some social planners and academic physicians to re-examine theirs? I hope so, because if we cannot achieve some kind of relative trust, some kind of mutual respect, some kind of honest research rather than preordained, self-fulfilling "studies," then medicine will not be reformed. It may be changed, but it will not be improved.

Some New Myths

Let me briefly sketch some of these new myths of the planners and point out their fallacies, but in doing so let me make clear that I have little enthusiasm for organized medicine's own social stands in the past and that I respect and admire many of medicine's critics. Right now, however, it is not the AMA, but the economists, sociologists, and medical academicians who are The Medical Establishment. It is they who have the ear of the labor unions, universities, and federal agencies. They are good people but as Professor Odin Anderson has written, they have become the sources of conventional wisdom in providing medical care, and any such source deserves careful scrutiny.

Take, for example, the almost obscene enthusiasm with which journalists and bureaucrats have latched onto the phrase "our non-system of medical care," as if they had found the ultimately devastating reply to organized medicine. Living and practicing in Washington, D. C., I must have heard and read that phrase 100 times in the past year, each time unveiled as if it were the 11th Commandment. *Of course* we have a non-system of medical care.

We also have a non-system of education —big colleges, little colleges, good colleges, bad colleges, protestant colleges, Catholic colleges—and a non-system of food production—supermarkets, corner groceries, big farms, little farms, surpluses, scarcities, malnutrition, obesity—and a non-system of everything else except military service and postal delivery. The American people and American political theorists have been properly skeptical about systems.

We don't think there is anyone smart enough to set up systems like this, and we are probably right. What we do in fact have are multiple, at times competing systems in transportation, in food production, in medicine—the VA system, the indigent system, the private system—and when things go wrong we prefer to improve one of the components rather than set up a single system. As a term of opprobrium, therefore, "our non-system of medical care" should be retired alongside "your father's mustache."

Another Cliche: "Mass Production"

We should deal similarly with the phrase "cottage industry," a term used with a mixture of contempt and amusement by count-

less planners and journalistic critics—references available on request—to describe American medicine. The original cottage industries, of course, were those in which the processing of a raw material into a completed product was done under one roof, often by one family. Industrially, the opposite of a cottage industry is mass production.

Of course, medicine is primarily a cottage industry, depending as it usually does on the mutual trust and respect of two individuals, the one seeking help, the other giving it. Medicine starts in that cry for help, and ultimately comes back to it. Medicine can be practiced on the assembly line—we all know of the armed forces sick call when the corpsman says, "All men with gonorrhea one step back for penicillin, all those with sore backs two steps forward for your aspirin, all you goldbricks in the middle back to your units." We can have assembly line medicine, but I doubt if we want it.

Of course, medicine can be modernized and improved. The profession has done a good bit of this itself. The difference is that when a pediatrician hires two aides to help him weigh babies and talk to mothers, our critics see it as a clever plot to make more money and they bemoan the decreased time the pediatrician spends with each child. But when a university hospital does the same thing, it become a "creative innovation in the use of paramedical personnel."

Let me add another difference: when practicing physicians are involved in developing paramedical careers, these careers have much more relevance than those dreamed up by chairbound doctors. The planners have the notion, for example, that paramedical people can be trained effectively to handle those trivial illnesses which are so much a part of the physician's daily work. Much as I would at times like to be liberated from the trivia of my practice, I recognize that it is often in these instances that a physician's judgment is vital and that the patient requires a physician's assurance.

A Place for Paramedical Personnel

On the other hand, I envision a great use for paramedical personnel in acute, life-threatening illness where the diagnostic options are few and the therapeutic measures urgent. The coronary care nurse, whose profession grew naturally out of the needs of physicians, patients, and hospitals, is an excellent example of this. The corpsman on the battlefield is another. Neither deals with "trivial" illness.

I envision great possibilities for paramedical people in the care of accident victims, with rescue squads capable of much more sophisticated care than the simple First Aid to which they are now limited. When you think about it, it makes much more sense to train a non-physician how to do a tracheotomy than to give him the judgment and experience necessary to tell whether someone's "trivial" headache is tension, tumor, subarachoid hemmorhage or any one of twenty other entities. By the time you've got someone who can deal effectively with trivial complaints, you might just as well have trained another physician.

In this context, too many theoreticians in medical care ignore the American public's compelling desire to "trade up"—in cars, food items, and medical care. Like most internists and family doctors, I'm frequently called by my patients to find them an ophthalmologist for their pink-eye, a neurosurgeon for their headache. This is an American phenomenon and it exists in all segments of society. For example, if in our justifiable concern about the problems of the cities we take too literally the concept of the ghetto, we may ignore the growing, numerically larger group of Negroes who are regularly employed, who are upwardly mobile, and who are suspicious of anything that smacks of second-class status or white experimentation with black needs. I suspect we may find readier acceptance of midwife deliveries in Cambridge and Berkley than in Watts or Sioux City.

There are many more myths. There is the myth that solo practice is doomed in the large cities, but still might have a chance in remote areas, while experience and insight show that it is just the opposite. There is the myth that treats American medicine as a single entity, ignoring the amazing regional differences in the organization of practice. Even that old saw about how the ancient Chinese used to pay their doctors while well—instead of when they were sick—is a myth. Perhaps a few noblemen had

doctors on retainers—good ones, we can presume—but the vast majority of people were on the same fee-for-service that most of us know.

Telling the Doers How

But rather than devoting this talk to iconoclasm, I would like to ask: Why do these myths develop? I suggest that one reason is the separation of most of these planners from the actual practice of medicine. This is an old complaint and certainly not unique to medicine. I do not intend it as anti-intellectualism. Let me quote Henry Aiken, one of America's great philosophers, talking about President Pusey of Harvard: "He went almost directly from Ph.D. to professional administrator and hasn't taught a class in 30 years. Now he's encysted within a colony of deans and assistants, and the ordinary faculty member never sees him." He goes on: "No man can spend a lifetime as an administrator or even as the head-of-department and have an understanding of the student or teacher."

Amen! How else can we explain the fact that, with a great boost from the Federal government and academic medicine, the medical schools between 1950 and 1968 concentrated on turning out molecular biologists, many of whom had little interest or ability in caring for human beings? In the past two years, the planners—and the communities—have discovered this fact, which certain gray-beared GP's had been pointing out all the time. The planners and the communities have decided that the medical profession has somehow been at fault and that the government must step in to remedy a situation which it was instrumental in creating in the first place.

How else do we explain the naive enthusiasm for preventative medicine in governmental circles, just as practicing physicians —and a number of epidemologists—are beginning to see its limitations. There is serious reason to doubt many of the campaigns for presymptomatic detection of disease that some physicians, many laymen's groups, and most economists think will reduce the cost of future medical care.

Surveying Ourselves to Success

Thus the more we know of diabetes, the less certain we are of the value of early detection or even of our treatment. Furthermore, the success of any of these programs is usually measured by the number of "presymptomatic" cases discovered. No study that I am aware of has delved into the wasted time and money in following up the false positives. No one has ever computed the morbidity and occasionally mortality in people whose only mistake was to get themselves involved in a disease detection program. No one can measure the neuroticism engendered by such programs. Only the practicing physician can feel it and worry about it.

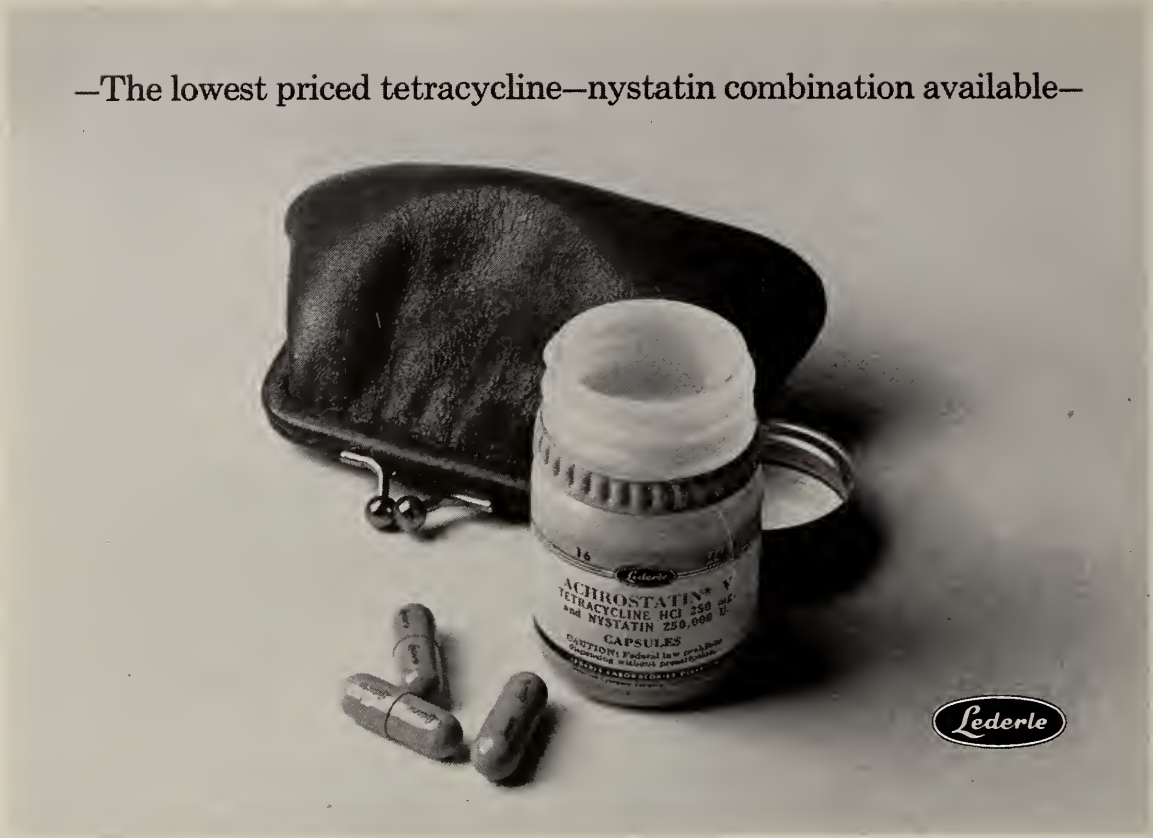
No, the practicing physician knows that the real killers in this nation—tobacco, fat, alcohol, depression—are very easy to detect, but very hard to eliminate. And the physician knows that a patient's wife may be more effective in preventative medicine than he ever will be. But the men in the Public Health Service are just like all other middle-class Americans—they hope that if you devote a day to a yearly physical examination or blood screening profile, you can eat, drink, and speed the other 364 days and you'll be safe.

It isn't true.

And lastly, what except invincible ignorance of what medicine is all about can lead decent, intelligent men to speak so glibly about efficiency in medical care, applying all the cliches about the value of bigness that marked the Blue Eagle NRA era to a field which is not the same as poultry-processing or shoe manufacturing? We've always known that from 70 to 80 per cent of an internist's or GP's work stems from the fears, worries, and sadness of his patients' lives. Even a lot of what we call obvious organic illness stems from this same kind of personal malaise—the peptic ulcer or colitis that occupies the surgeon, the trauma that busies the orthopaedic surgeon, the neurologic, infectious, intestinal complications of alcoholism which absorb *everybody*.

We know all this; the planners know it too, and yet they ignore it. They plan for a kind of cost accountant's efficiency which may cost us far more in the end than our present non-system. Even the advocates of large group practices point out that, because of scheduling exigencies, patients who need immediate appointments can not

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No, America is not crippled by presymptomatic gout. It is instead tormented by fear, ambition, and loneliness. We have our triumphs, but we have them at a cost. We move too often. Our parents are in Florida, our children on the Coast. Home is where we graduated from high school 20 years ago. Friends are the people we graduated with. Neighbors are the people who will move away next month. The cop on the beat is a face in a prowl car. The neighborhood butcher is a pair of hands wrapping supermarket meat. The corner merchant is a nice young man on a two-year assignment from J. C. Penney.

The one person who keeps his links to our more personal past, not only into our childhoods, but back into a long tradition of science, literature, and the arts, is the physician. We can best meet the needs of the future by retaining the keystone of the past —care for the patient. We are not city planners nor were we meant to be. We should, I have written, know more about our society and its people, not so that we may crusade to reform society, but rather to better understand—and therefore better help—our individual patients.

We have a privileged place in society, and we can use that well by giving honest, imaginative consultation to those working with us in the reform of medicine. The practicing physician may not know everything about the delivery of medical care, but he certainly knows *something.* And there will be times when the physician, moved by community problems or by personal concerns, becomes active in problems affecting the health of a larger group—pollution, drug abuse, race relations, black lung disease.

I myself have worked in some of these areas, but I do not urge such involvement on every physician, and I have high regard for some of my colleagues who never read the daily paper. Tempting as such participation is, we must remember that every hour the psychiatrist spends arguing over staff problems with the community board, every minute the surgeon sits listening to plans for where the city's cobalt unit should be located, every second an internist sits working over a speech such as this, is time diverted from care of their patients. And care of patients, ladies and gentlemen, is what medicine is all about. (*From The Ohio State Medical Journal, May 1969)*

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Please see next page for complete prescribing information.

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(isoproterenol sulfate)



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SUMMARY OF PRESCRIBING INFORMATION

DUO-MEDIHALER®

(isoproterenol hydrochloride and phenylephrine bitartrate)

Indications: Duo-Medihaler provides relief of dyspnea resulting from bronchospasm and congestion and edema of the tracheobronchial tree. It is indicated in:

1. Acute bronchial asthma and other allergic states
2. Chronic obstructive pulmonary diseases, such as chronic bronchitis and pulmonary emphysema.

Contraindications: Known hypersensitivity to either agent constitutes a contraindication to the use of this drug. Isoproterenol preparations are generally contraindicated in patients with pre-existing cardiac arrhythmias associated with tachycardia because the cardiac stimulant effect of the drug may aggravate such disorders.

Warnings: Excessive use of an adrenergic aerosol should be discouraged, as it may lose its effectiveness. Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn.

Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

Caution: Federal law prohibits dispensing without prescription.

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Indications: Dyspnea, resulting from the bronchospasm associated with:

1. Acute bronchial asthma
2. Chronic bronchial asthma
3. Chronic bronchitis
4. Emphysema

And as an adjunct in the treatment of drug sensitivity reactions, injected allergens, urticaria, and other allergic manifestations.

Contraindications: Use of isoproterenol in patients with pre-existing cardiac arrhythmias associated with tachycardia is contraindicated because the cardiac stimulant effects of the drug may aggravate such disorders.

Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

Precautions: Isoproterenol and epinephrine should not be used concurrently; combined effects may cause serious arrythmias. Their use may be alternated if an interval of at least four hours has elapsed. As with all sympathomimetic drugs, isoproterenol should be used with great caution in the presence of cardiovascular disorders, including coronary insufficiency, or when there is a sensitivity to sympathomimetic amines. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Adverse Reactions: Only a small percentage of patients experience any side effects following oral inhalation of aerosolized isoproterenol. Overdosage may produce tachycardia with resultant coronary insufficiency, palpitations, vertigo, nausea, tremors, headache, insomnia, central excitation, and blood pressure changes. These reactions are similar to those produced by other sympathomimetic agents.

Dosage and Administration: See above.

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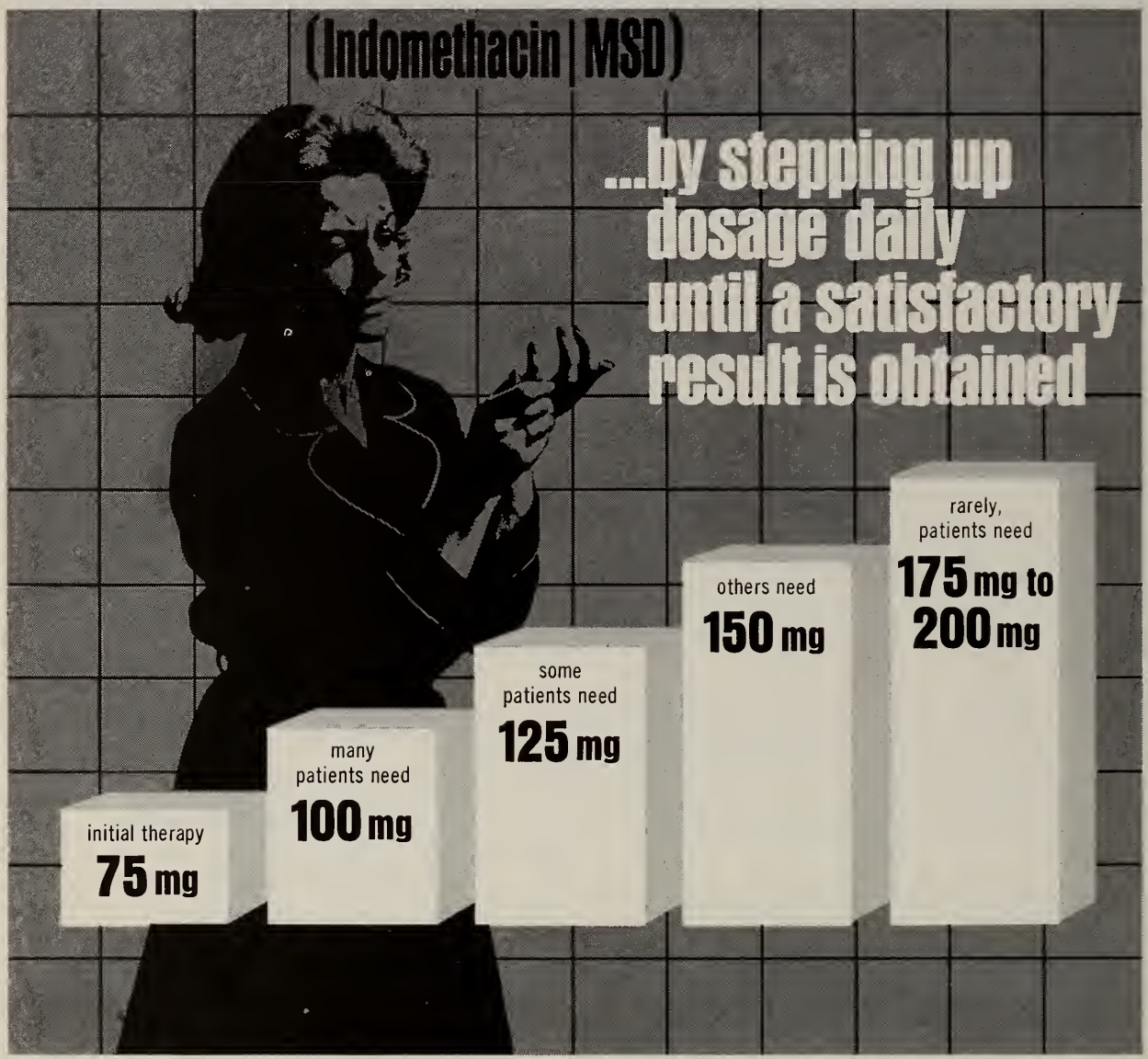
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- during pregnancy or lactation
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For additional prescribing information, please see following page.

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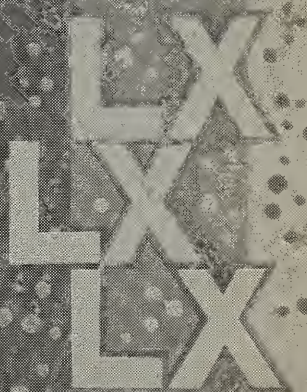
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(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville, Tennessee 37203.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

If reprints are desired, the requested number should be indicated in the letter accompanying the manuscript. The author will be billed by the publisher.

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Let's Lead Rather Than Be Led*

DWIGHT L. WILBUR, M.D., President, American Medical Association,
San Francisco, California

Leadership of medicine and of medicine in relation to society and to government is the prime problem of the profession for the final third of this century.

Not only the future reputation of the medical profession, not only our so-called "image," not only the esteem in which the profession is held, but the very existence of the medical profession as we know it now depend on our activities and our success in leadership, including that of public affairs and all of our relations with the public.

We face the traditional and continuing challenge of ministering to every person as an individual. That hasn't changed. But added to it is the equally important, and even more difficult, challenge of ministering also to all of human society in our nation.

This is a relatively new responsibility for our profession. It is one that many of our members are not yet ready to accept; and one for which many of us are not prepared. But the successful discharge of that responsibility will influence the field of medicine as significantly in the years ahead as three outstanding movements earlier in this century have influenced medicine as of this date.

The *first* was initiated by the medical profession and activated in 1908 when the Council on Medical Education of the AMA with the financial and technical support of the Carnegie Foundation for the Advancement of Teaching surveyed the quality of medical education in the United States.

The results of that survey, published in 1910, are remembered and honored to this day. The Flexner Report, as it is known to us, revolutionized medical education. Because of its influence, plus the AMA's subsequent support of the establishment and strengthening of state licensing boards and the AMA's continuing, cooperative activities in the accreditation of medical schools, the medical profession played a leading role in making American medical education the finest in the world.

Our schools today attract students from virtually all nations, whereas in earlier years our students went abroad for what was then the best available medical education.

The *second* major influence has been the great advances in medical science and in the knowledge, equipment and methods today's physician uses in caring for his patient.

This is an area to which the profession has contributed much, and many others have contributed—directly or indirectly.

Let me remind you that approximately at the turn of the century, life expectancy in this country was 46 years. One of every six infants died. The principal killer diseases were diphtheria, pneumonia, typhoid and tuberculosis. There was essentially no sphygmomanometer, no x-ray diagnosis, no blood chemical tests, no specific treatment of disease, no specialization of physicians.

Elective operations were rare because asepsis, intravenous fluid therapy, blood transfusions and good anesthetics were yet to come. There were nurses, but few other allied health personnel.

It is difficult to accept that physicians of that day and this were even in the same profession.

The *third* significant influence has been the growing infusion of federal tax money and federal programs into the health field—not only in research and education, but also directly into patient care.

Government involvement in health is not new, although it has drastically changed. It began with marine societies, created for the

*Read at the annual meeting of the Tennessee Medical Association, Gatlinburg, Tennessee, April 11, 1969.

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benefit of merchant seamen by several colonies before there was a United States. That involvement has grown substantially and, in recent years, at an accelerating rate.

The 89th Congress saw 1,600 bills of medical or health interest, and passed more health programs than any previous Congress; 1,400 such bills were introduced into the 90th Congress.

In fiscal 1960, the appropriation for Federal health activities was $3.2 billion. This sum grew to $3.8 billion in 1961; $4.4 billion in 1962; $5 billion in 1963; $5.5 billion in 1964; $5.9 billion in 1965; $6.6 billion in 1966; $11.3 billion in 1967; $14.2 billion in fiscal 1968, and in the bill passed by the 90th Congress, almost $20 billion. This was almost $6 billion more than last fiscal year.

These three influences—the increasing excellence of medical education and the advances in medical science, both of which have vastly improved the quality of care provided by today's physician . . . and the growing involvement of government in programs to finance or provide health care for large segments of the population—have played significant parts in creating the over-all picture of medical and health care as we see it today.

They also have led to what I consider the fourth major influence of this century: the task of relating the field of medicine to all of society.

In the past, medicine has been primarily a personal relationship, between one physician and one patient. Public or government interest generally was limited to such public health concerns as environmental improvement, sanitation and the prevention and control of epidemics.

Not any more. Today—and even more tomorrow—medicine and health are matters of total public concern. The ready availability not just of adequate care, but of excellent medical and health care is now interpreted by government and by many among the public as a basic human right, along with life, liberty and the pursuit of happiness.

The question that now demands an answer by our profession is whether in serving all of society we shall be the leaders, as we were in revamping and professionalizing medical education . . . shall lead, but share our leadership with others, as we have done in scientific research and medical advances . . . or remain aloof, concentrating primarily on what we decide are our own interests, and expressing our disapproval of ideas proposed by others, as we have done for the most part with respect to the growing interest of government in health care.

My answer is that we must not, we cannot, remain aloof if we want to preserve the medical profession as the essential and viable profession it is today.

If we do not become the leaders, although sharing leadership with others who have a legitimate interest in health care, we shall find that in this important matter of relating medicine to society, the public will assign us a position as followers and, ultimately, as subordinates.

Let us assume that a medical association wants to claim its rightful leadership position. How can it be achieved? The passage of a resolution isn't going to do the job, nor is a public announcement. Leadership is not conferred on those who merely decide they want it. Instead, it is given to those who can clearly show by their actions that they are qualified for it and deserve it. Leadership, at least in a democracy, is not assumed. It is earned.

I believe there are 10 points in a program of medical leadership.

The *first* is to become familiar with all of the health problems in the local community or state. That includes not only the kind of problems individuals have who need help, but also the kind of problems all of the personnel and institutions in the health field have in providing that help.

This means the medical profession must establish a close, working liaison and have free exchange of information with all the professional and nonprofessional people in the health field. Included here would be all organizations of physicians, dentists, nurses, technicians and technologists, voluntary health agencies, public health officers, medical schools, hospitals, extended care facilities, welfare and social service agencies, health insurance companies and prepayment plans, and, of course, the public itself, which can best be reached through its organizations, such as civic clubs, fraternal organizations, women's groups and

churches, as well as all levels of government plus industry and organized labor.

Through cooperation with all of these forces, the medical profession can show its genuine interest in the availability of care for all citizens and in breaking down any barriers between people and the care they need. The best means for establishing such cooperative efforts are through the participation of the profession in initiating or effectively assisting, in the development and function of planning bodies, councils, committees, at the local, regional or state level. Local people are most familiar with the local situation and with local needs.

Our leadership must be cooperative and not dictatorial. Our knowledge of health may be unique and indispensable, but our desire to serve all of society is matched by many of its other elements.

Second, we must devise desirable legislative programs and work to get them enacted. We must participate in the legislative process at every level of government, from city hall to Congress and the White House, in the planning and administration of health laws and regulations. In doing so, we must keep in mind the best ways to meet the needs of the public for the benefits of physicians' services and other forms of health care that are available.

It is vital that we help everyone understand the often wide difference between actual need and demand for what is desirable. If this distinction is not made, it can lead to highly emotional situations that result in precipitous political action to solve impossible problems and are inordinately expensive.

Third, we must play a more active role in maintaining high standards of quality in medical practice, particularly by urging physicians to participate in continuing medical education. Certainly this is a kind of leadership that the public expects of us. It will help answer the growing interest in relicensure or re-accreditation of physicians.

At the national level, the AMA has long recognized the importance of continuing education of the practicing physician and has contributed substantially through scientific meetings, scientific publications, national conferences and, now, a program of accreditation for continuing education courses offered by a variety of institutions.

At the Clinical Convention in December, 1968, the House of Delegates established a mechanism recommended by the Board of Trustees to recognize formally physicians who participate in continuing medical education.

Under the program, a physician may, upon request, receive the recognition award at the completion of three years of graduate training in AMA-approved programs, or the equivalent in research activity or in educational programs leading to further advanced degrees in medical sciences.

Funding will include a registration fee of $5 for each physician who wishes to participate—a fee that would be paid only once in each 3-year period.

Fourth, we need to better understand and to assume the proper responsibility for the costs of medical care and to increase our concern for expenditures for hospital care.

Just as we have prime responsibility for the costs of our services in hospitals, so must we increase our concern with the economic factors in hospital costs. We must see that physicians become members of Boards of Trustees and Directors of hospitals and become more knowledgeable of the cost to their patients of hospital services. I believe it would be very helpful if every physician received a copy of the hospital bill of his patients so he would be aware of the costs to them of hospital services and of the professional care he had ordered.

We must recognize and tell the public honestly and frankly that for some time health care costs will continue to rise, and tell them why. Increasing wages of hospital employees including nurses, house staff and nonprofessional groups, inflation, growing population, greater demand by more patients, more expensive facilities and higher trained personnel, higher costs of personnel and payment for services by third parties, either private or governmental doubtless will raise the cost of health and medical care in the future.

It is generally understood that automobiles and all other goods and services cost more as they are refined and improved. We ought to be able to show people that the

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same is true for essential services and necessary facilities for health care.

At the same time, we must try to hold down our patients' expenditures by making use of hospitals only when clearly necessary and by encouraging the development of more extended care facilities, better insurance coverage for more home care services, for out of hospital services including prescription drugs, along with all the other things we can do to help save money.

The charges for professional services and the gross income of physicians will increasingly come under public scrutiny. Here we must recognize the concern of the public, the government, employees, labor and others. A sound approach on the basis of the usual, customary or reasonable charges for services, with peer review when necessary, seems the obvious, mature and sensible approach to this difficult problem, which may indeed be the vulnerable point in our efforts to avoid a fixed-fee schedule and arbitrary decisions of those outside the profession to control it effectively.

Fifth, in order to prove not only our good intentions, but the real excellence of today's medical care, we need to concentrate more attention on adherence to medical ethics by our colleagues, to utilization review by physicians of the use of health care facilities, to peer review, and discipline by the profession of members who do not measure up—not just to the level expected by the public, but to the higher standards we set for ourselves.

Sixth, we must continue to advance our knowledge of the causes of major illnesses. Our profession can play no greater role in the health betterment of today's people and of generations to come than by generously supporting research that will expand the profession's ability to diagnose and to cure disease and prevent it.

Seventh, we must help generate support from individuals, business, labor, government and all other sources for the expansion of medical schools and the establishment of new ones, where necessary, so that eventually every qualified applicant for a medical education can get it.

I believe every practicing physician should contribute at least $100 a year to the AMA-ERF for medical schools or give directly to the medical school of his choice. This would bring $20 million a year to our medical schools—a great boon to medical education and a clear indication to industrial, corporate, foundation and individual contributors that we in the profession are vitally interested in supporting medical education, and in expanding it. Since this contribution is tax deductible, the actual amount given would often be significantly less than $100.

Similarly, we must encourage quality education for larger numbers of men and women in all the allied health professions and services.

Eighth, we should demonstrate the effectiveness of the private system of medical care and of the voluntary health insurance and prepayment mechanisms. We must make them more effective, more widespread, more comprehensive and as economical as possible.

Particularly, we should continue our efforts to achieve wider insurance and prepayment coverage outside of the hospital, in the physician's office, home, or in extended care facilities . . . and of additional items such as prescription drugs and private duty nursing.

Government financing is clearly not the answer to problems involved in covering health care costs. But in order to assure that the voluntary system is the answer, we must work with carriers to make health insurance and prepayment increasingly effective, efficient and comprehensive.

Ninth, we must collect the facts on the economics of medical practice and of all health care so that we become the recognized experts in this field.

Little is known now, for example, of variations in the economics of health care provided by the solo practitioner, the group, the specialist, the generalist, the hospital-based physician, the physician in a large city, and the physician in a rural area.

Nationally, I hope to see the American Medical Association become this nation's bank of information on every aspect of health care economics. At the state level, each state should have a similar responsibility.

Finally, number *ten,* whatever activities we undertake, we must remain free. We

must be and act as a profession, and not become a group of technologists. We must guide our destiny, and not be guided by others. We must lead, and not be led.

Cooperation with others in planning for health care does not mean compliance with the plans of others that would harm the patient by dehumanizing the care that is to be made available to him.

Whether we are family physicians or specialists in a narrower field, each of us must maintain the strength of the physician-patient relationship that is so much a part of successful medical care. No plan for providing care can be good if it weakens or eliminates that relationship.

As physicians we have learned that we treat not just a disease, but the whole patient. We are now learning that as we view the individual we also must see the group of which he is a part.

In other words, as I indicated earlier, we minister not just to the man, but to society. I accept that as all of us must. But through it all, we must never overlook the individuality of the patient and of the physician. Both must be preserved.

Accomplishment of these aims will not be easy. Although each of them obviously is well within the profession's area of competence, none will likely be reached without some opposition from agencies, organizations, groups or individuals with whom we are trying to cooperate.

To undertake a program, or package of programs this large, the association will have to count on the dedicated efforts of many of its members.

It will mean the enlargement of the staff of our local, state and national associations. It will probably mean an increase in dues. But the dividends that will flow to the American and to our profession as we implement and enlarge our responsibilities to the public, will be greater than the slight cost to us in dollars.

One very special group must be assigned to coordinate and oversee the entire leadership project. This can be the existing Board of Trustees or Directors, or it can be a special committee appointed for that purpose. It should include participation by younger physicians in the society.

The Association as a whole, if it wants to accomplish objectives as vast as those I have outlined, will need an over-all attitude of leadership, not by a few members, or by the officers, but by the entire membership, in their own practice and in association activities.

As we enter this era of fateful developments for the health of our country and its people, as well as for the future of our profession and its services to the public, let us focus on directing the course of the future. We must do this by planning, by being prepared, by turning unexpected developments in the direction of progress, by fostering high quality of medical care, by developing broadened availability of it, and by carrying out all of the other activities I have talked about, plus the many more that will occur to you and to other associations who undertake this exciting responsibility.

We must also invigorate the growth of our profession by increasing our numbers and by motivating our young members and passing on to them a bright and unflickering torch of devotion to human service.

We are among the most privileged of men to have this challenge, this opportunity to direct the course of human destiny and improve the course of human welfare.

Let us assume the challenge with confidence and true statesmanship.

HEALTH SCIENCES LIBRARY

The overuse of drugs by persons without medical supervision is one of society's great problems. A solution seems almost impossible. All medical professionals must join in an educational effort to reach potential users—the young.

Drug Abuse*

JOHN H. WOLAVER, M.D., Knoxville, Tenn.

The American Medical Association, through the Tennessee Medical Association, and specifically by Dr. Winston, Commissioner of Mental Health for the State, and also specifically by Dr. Luton, Chairman of the TMA Committee on Mental Health, I have been asked to give this talk on drug abuse. In spite of the many authoritative influences, let it be said that I was glad to accept this request because I think it is a neglected area and because I think that psychiatrists need to help in formulating general medical thinking on the subject. The scope of this paper on drug abuse does not include scientific research; rather it is intended to be oriented toward those practicing psychiatry, not only technically speaking, but also to all those belonging to society. It should have a medico-social-cultural orientation, since as one of my teachers aptly stated on one occasion, "First, you are a man, secondly, you are a doctor, and thirdly, you are a psychiatrist." This paper is addressed to all three of these categories.

Many, if not most of you, are well versed as to the pharmacology, medical indications, precautions, actions in the body, and uses of the drugs under discussion. However, I think it is altogether possible that not all of you will share the same attitudes and feelings concerning the use or misuse of these drugs. Drug abuse is defined as unsupervised self-medication. The other day I saw a postoperative patient for an orthopedic surgeon who had removed a pin in her hip; she was in the hospital and going through the hallucinatory rambling and picking type of behavior familiar to us all. In my opinion, and because she was an old woman, I stated that "Although it resembled a toxic-psychosis, I thought the underlying etiology most probably was psychogenic." Later that afternoon, by telephone, the referring doctor told me that she had been taking rather large amounts of percodan† and suggested that the patient might really have a toxic withdrawal from codeine. Of course, I agreed, and together we decided to eliminate codeine from the armamentarium in the future. A few days later I heard that she had expired. With a twinge of guilt, I thought to myself that she may have died because I was not sufficiently careful to suggest gradual withdrawal of codeine; however, the surgeon informed me a week later that the blood chemistry had begun to show accumulations of toxins, and that she had become moribund, and, that he had undertaken no heroic measures to save her life—this for a number of reasons. Even though I accepted the idea of a postoperative surgical death and agreed with his medicosocial judgment, I still felt somewhat "shabby" on the basis that the abuse of codeine had been treated quite lightly and, had in fact, almost been overlooked.

For our purposes this afternoon let me divide the drugs for consideration into four groups. The *narcotics* are the first group, including heroin, codeine, morphine, and dilaudid. The second group are the *sedatives,* including phenobarbital, secobarbital, pentobarbital, amorbarbital, the tranquilizers, and, of course, alcohol. The third group are the *stimulants,* including amphetamine, methamphetamine, and phemetrazine, and the amphetamine-barbiturate combinations. The fourth group are the *hallucinogens,* some of which are peyote, mescaline from cactus, bufotenine, psilocybin, dmt or dimethyltryptamine, LSD or lysergic acid diethylamine, and marijuana or cannabis. This group also included "glue sniffing" of the volatile hydrocarbons such as various alcohols, chloroform, toluene, etc.

To deal with each of these groups briefly and consecutively, first let us consider the narcotics, all of them opium derivatives or

*Read at the meeting of the Tennessee District Branch, American Psychiatric Association, April 11, 1969, Gatlinburg, Tenn.

†Oxycodone HCL, oxycodone terephthalate, homatropine terephthalate and phenacetin.

synthetics such as methadone or meperidine. Abraham Winkler in a monograph on *opiate addiction,* (p953), states "The addiction or abuse is characterized by four phenomena: namely, emotional dependence, tolerance, physical dependence and the tendency to relapse after repeated 'cures.'" Of course, the psychiatrist would immediately be concerned with the specific reasons for the emotional dependence in an attempt to understand how the drug habit becomes such "a way of life" for the user. These people are typically narcissistic, passive-receptive, orally-fixated, insecure, with overprotective mothers, with little true sexual interest, and usually of a sociopathic or neurotic personality type, committing small crimes to obtain the funds necessary for the continued drug abuse. Specifically, the drug is thought to relieve pain and to reduce hunger and general erotic urges.

The second group are the sedatives: alcohol has always meant relaxation—abuse of alcohol occurs when the individual alcoholic loses control over his drug intake. The present generation seems to be expressing itself by turning away from the drug of choice of their parents and trying a few new ones. Let us be reminded that the enormous problems of alcohol addiction itself are, as yet, unsolved.

Between 1850 and 1930 the chief sedatives were bromides. Of course, the various barbiturates followed the use and abuse of bromides.

You all know the younger group of "goof-ball" users, but many abusers of barbiturates are quiet, middle-aged or older people who began taking the medication under a doctor's care and later obtained an illegal supply. They are often overly-dependent persons who try to relieve life's tensions and pain only to find that unless the drug is continued life becomes repeatedly unbearable. These individuals live quiet, semistuporous or even bedridden lives with the ever-present threat of suicide due to accidental or intentional overdosage. A few use sedatives with other drugs to get "far out" results; some persons obtain stimulation instead of sedation; and some use them to produce a sedation-stimulation cycle by alternating with amphetamine-like drugs. As you know, the withdrawal from barbiturates can produce convulsions and even death due to the strong physical dependence. A patient I saw in the hospital last month promptly began a grand mal seizure when I asked "How are you?"

From about 1950 to the present time is the era of the tranquilizers. How many of you have any number of patients who take medication as directed? How many of you consider that it is safe, desirable, and wise to treat in-patients or out-patients on upwards of 800 mg. of Thorazine daily on a continued treatment regimen? Who of you has seen and treated severe drug reactions? How many of you have followed through in an attempt to check out an illegal source of supply or to phone the pharmacist to enlist his help to control a self indulgent patient? I submit that the tranquilizers are an improvement but not without the hazard of drug abuse.

The drugs in the third group, the stimulants, including amphetamines and related compounds, have only two noncontroversial medical uses; namely in the treatment of narcolepsy and of hyperkinetic disorders in children. Yet, in 1962, 100,000 pounds of amphetamine and methamphetamine were produced. This amounted to 25 to 50 doses per person that year for all the men, women, and children in the United States.

I do not often prescribe this class of drugs and do so in the smallest effective dosages (unless the patient has succeeded in corrupting me) because there are so many nonmedical requests. For example, their use by athletes in sporting events helps the user to extend himself beyond safe limits; their use by students taking examinations or by business men planning strenuous workweeks; or their use for trying to keep awake—all of these seem to me not to be medical problems. I always suspect such requests as emanating from a troubled personality and prefer to treat them otherwise. Even though withdrawal is physically noneventful, so-called "amphetamine psychosis" with hallucinations can result from overuse. Abrupt withdrawal can bring about deep depression and possible suicide.

Group IV, the hallucinogens have no known medical use—except possibly in research. In reality they are misnamed because they tend to produce more sensory

distortions than they do true hallucinations. The most popular is marijuana, *Cannabis sativa.* It is smoked, eaten, or drunk throughout the world; in stronger forms called ganja in India, Hashish in North Africa, Dagga in Mexico, and Bhang in South America. The flowered tops of the plants are usually called "pot, weed, or grass," and smoked in "reefers, joints, or sticks." The stronger forms contain crude or purified cannabis resins. There is no physical tolerance and dependency; its use is more by rebellious young people with developing psychiatric problems than by more secure and organized youngsters. Those in urban populations with ghettoes where hopeless, futile and oppressive dissatisfaction abound are most susceptible.

Most users do not continue with the drug; often abusers of other drugs have used marijuana early in their drug history. Some symptoms are euphoria, hilarity, distortions of time-space perception, impaired judgment and memory, irritability and confusion.

A late development is "glue sniffing" by 10 to 15 year-olds; namely, inhalation to the point of intoxication of volatile hydrocarbons found in model airplane glue, paint thinners, lighter fluid, etc. Liver, kidney, bone marrow and brain damage has resulted in many instances. Tolerance is built up to the point where 5 tubes of glue are required; at the Knoxville Juvenile Court several youngsters have had severe jaundice when first apprehended by the police.

Peyote and mescaline from cactus have similar effects; psilocybin from a mushroom is also classed as hallucinogenic; so is DMT (Dimethyltryptamine), a synthetic indole, found naturally in the seeds of a South American plant. There is a cross-tolerance between most of the above drugs and LSD.

LSD, Lysergic Acid Diethylamide, was synthesized in 1938 by Dr. Albert Hofman; it is found naturally in ergot, a fungus growing on rye and wheat. Dr. Hofman experienced the first "trip" when he ingested LSD accidentally in 1943. Currently Dr. Timothy Leary is espousing the "mind feeling" effects although evidence to the exact contrary is beginning to accumulate. Physical dependence is not present but psychologic dependence and resulting psychopathy are produced according to recent studies in California, New York, and London. Some of these do not clear up readily. All users become less productive; many become delusional, some take chances resulting in death, and a few committed suicide. There is also current evidence of chromosomal damage. In these instances, LSD drug abusers are using an illegal supply, illegally produced, because Sandoz Pharmaceutical Company, in 1966 turned over its entire remaining supply of 22 grams of LSD to Nimh. Either Nimh or its designated investigators need to account for their supply of LSD to the Commissioner of the Food and Drug Administration which has statutory control of the chemical. Currently an LSD committee makes recommendations concerning it both to the Surgeon-General of the Public Health Service and to the Commissioner of the Food and Drug Administration.

Needless to say, all of these drugs are not only being abused but are also illegal unless they are used under the direct supervision of a physician. There are penalties in most states for narcotic abuse, and some of the states are beginning to make it a felony to use marijuana or some of the lesser drugs. I will not go into the details of this though we can all feel secure in the knowledge that unless patients are doing what they should be doing with the above drugs according to prescription, they are operating outside the law.

You will recall that you should function as a psychiatrist, as a physician and as a man. I submit, in closing, that you are rather completely avoiding the latter two roles unless you participate in helping to lead your community toward a safe and practical vantage-point in regard to the recognition and handling of drug abuse. For your information, the AMA has produced a concise group of papers, folders, and other information in kit form, also containing samples of ways to disseminate information to the public. These Drug Abuse Kits are available for the asking, and you can use them in conjunction with your local county medical association to achieve your goals.

The paper entitled "Dependence on LSD and Other Hallucinogenic Drugs" as printed

in the *Journal of the American Medical Association* (202: 47, 1967) states very well the role that should be played by a psychiatrist who is also a physician and a member of the human community, so I will quote from it, "Only an aroused and concerned public can create, mobilize, and implement resources to deal adequately with as serious a problem as drug dependence in all its forms. Education, which can provide the proper stimulus to accomplish this, must come from community leaders aware of the needs and from professionals who apply themselves to these needs.

"Frank and forceful public discussion, focusing on the futility and inherent dangers in experimentation with drugs such as the hallucinogens and on the consequences of dependence, may deter the uninitiated from starting. Expanded counseling services in schools could provide more effective and more suitable alternatives to young people in dealing with their problems.

"Persistent vigilance by law enforcement agencies in eliminating illegal sources of the drug needs public support and sufficient funds to do the job. Real crusading may be required before sufficient public and private funds are devoted to creating and operating adequate treatment facilities and programs for the afflicted and for the control of illicit drug use. And finally, only community understanding, compassion, interest, and active aid will enable the rehabilitated drug-dependent person to find a satisfactory place in society."

* * *



The clinical disciplines are faced with the devisive effects of subspecialization upon basic education, knowledge and skills. The author and his colleagues are attempting to solve this riddle and have proof that basic requirements have been met.

A Plan for a Basic Surgical Residency*

H. WILLIAM SCOTT, JR., M.D.,† Nashville, Tenn.

In his presidential address to the Society of University Surgeons in 1948, Zollinger[1] summarized the trends in specialization which were dividing and separating general surgery and the surgical specialties and converting the field of general surgery into a narrow specialty. He presented data at that time to support the conclusion that broad training in general surgery is desirable before intensive specialization.

Dr. Zollinger further stated in this address that surgical teaching programs had a dual educational responsibility: (1) to supply the basic surgical training for candidates for the Surgical Specialties and (2) to furnish the requisite experience for those going into General Surgery.

Twenty-one years have now elapsed since Dr. Zollinger's thought-provoking presentation. During this period the trends of specialization in surgery and in graduate surgical education have continued and have resulted in an increasing separation of the surgical subspecialties from general surgery both in residency programs and in practice. That specialization represents the progress of our times with productive benefits is both undeniable and commendable. However, continuation of this trend in an unguided manner may lead to a ridiculous degree of overspecialization of interests with narrow perspectives and the substitution of early acquisition of specialized skills on a trade school basis for graduate surgical education.

The extremism of specialization in surgical education has been enhanced by the very nature of the institutions which control and direct graduate medical and surgical education in the United States today.

The Various Specialty Boards

The influence of the several surgical specialty boards and their residency reviewing agencies has become enormous in the last two decades. Although a joint conference is held annually, each of the surgical specialty boards is entirely autonomous and establishes its own criteria for training qualifications and certification in its field. With the exception of the Board of Thoracic Surgery, none of the surgical specialty boards has a direct relationship to the American Board of Surgery. Instead the majority of the surgical specialty boards are individually autonomous units with a very minimal degree of interdependence.

Despite repeated suggestions through the years that graduate surgical education is rightfully a function of the medical schools, it has become increasingly apparent that the universities and their affiliated hospitals as currently constituted are inadequate numerically to supply all the demands of graduate surgical education.

During the last decade various groups interested in graduate education in surgery have become concerned with the trends which are promoting premature specialization in surgical fields. While wide differences have been expressed, there has also been a degree of unanimity of opinion concerning the mutual interdependence and interlocking needs of general surgery and the surgical specialties in residency training.

Eight years ago we made a study of the educational structure and content of a large number of university hospital surgical residencies and it was concluded that the majority of these included in their first two years well balanced basic programs of graduate education in the general field of surgery including experience in the surgical specialties.[2] At that time we obtained a good deal of information from the heads of surgical training programs which supported the concept that experience in general surgery and experience in the surgical specialties are inseparable components of the

* Presidential address, Tennessee chapter, American College of Surgeons, April 10, 1969.

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graduate education of both general surgeons and surgical specialists.

Experience With a Basic Surgical Residency

Accordingly, several years ago we set out to establish at Vanderbilt University Medical Center, which has three general hospitals in its integrated training programs, a plan for a basic surgical residency. In this program we included our straight surgical internship of 12 months duration and the succeeding two years of our surgical residency.

In the twelve months of the straight surgical internship all trainees were given seven or eight months of assignments to ward work in general surgery and the emergency services and four or five months of assignments to the surgical specialties. In order to rotate the trainees through these multiple assignments in the internship, the time allotted to a given service was only one month.

The two years of the junior assistant residency included approximately six months of general surgical ward assignments and six months of surgical specialty ward assignments during each of the two years. Progressive responsibility was provided, and in the second year of the program, the trainees were given the opportunity to assume a good deal of responsibility for the care of their patients including a great deal of the operative work with appropriate supervision by the senior members of the house staff and the members of the attending staff.

In the last eight years we have requested but not demanded that members of our housestaff who wish to go into the surgical specialties complete this basic residency program.

While a fairly large number of our surgical specialty trainees and all of our general surgical residents have completed this basic residency program, a very practical set of problems has occurred which limits the practicality of providing a program such as this for all surgical trainees.

The major problem has to do with the military obligations which each man assumes currently at his graduation from medical school.

As a byproduct of the Berry Plan for induction of post-doctoral trainees into the Armed Services, it has become established that an individual who applies for and is not granted deferment for full residency training under the Berry Plan can usually obtain at least one year's deferment upon application for same and thus remain in a surgical training program for at least one additional year of training after the internship.

Since the majority of our trainees are *not* granted full Berry Plan deferments for completion of their training, it is clear that the great majority of men today who wish to pursue surgical training after graduation from medical school have available to them only two years for graduate surgical education before they are inducted into the armed services.

Since the Vanderbilt basic residency has been planned as a 3-year period of basic training including the internship, difficulties in its implementation are obvious. Problems have been particularly pertinent in the case of men interested in the surgical specialties. In their situation it has seemed both unrealistic and inappropriate to insist that a trainee, who graduated from medical school 4 years previously, who has had a surgical internship, one year of surgical assistant residency, and two years in the Armed Services (usually working as a surgeon and often with 12 months in Vietnam), return to our graduate educational program for an additional year of basic surgical experience before he enters the surgical specialty training program of his choice. Furthermore, for those specialty trainees who do obtain full deferment the Berry Plan has usually allowed them only one year of surgical residency prior to their specialty residency.

Accordingly, our 3 year basic plan has worked well only for men going on with residency training in general surgery, thoracic surgery, and plastic surgery. It has not fitted the needs well of those interested in urology, neurosurgery, and orthopedics.

Millis Report

The report on the current problems of medical education in the United States presented to the American Medical Association by President Millis of Western Reserve

University and his committee in 1966 called attention to the anachronistic nature and discoordinate role of the internship in graduate medical education. The Millis report suggested that the internship be abandoned and that the residency alone serve as the basis for a better coordinated program of graduate medical education.

Although the Millis report placed its emphasis on the rotating internship and did not treat specifically the straight surgical internships which are present in so many university programs, it brought clearly into focus the fact that the internship is a relic of a past which did not include the residency system and it is indeed an anachronism.

If the internship were dropped and the first post-doctoral year of graduate training in surgery became a part of a well planned 2 year period of basic surgical residency, there should be many educational advantages.

Work of the American Board of Surgery and the Advisory Board for Medical Specialties

Over the last 8 to 10 years the American Board of Surgery, through its representatives to the annual conference of Surgical Specialty Boards (the Surgical Specialty Section of the Advisory Board for Medical Specialties), has made a plea for the establishment of a basic or qualifying board examination to assess "core knowledge" of surgical and surgical specialty trainees after a period of basic surgical training and prior to acceptance by a board for a final or certifying examination in either general surgery or a surgical specialty.

After a good deal of controversy an ad hoc committee on Basic Surgical Residency Training has been appointed by the Advisory Board. Two meetings of this committee in the last 6 months have produced a plan for a basic surgical board examination and suggestions concerning a plan for basic surgical education. In summary, the attitude of the Advisory Board Committee is that the several surgical specialty boards should support and foster the concept of a plan of basic surgical education in breadth which would qualify all surgical and surgical specialty trainees for an examination, testing "core knowledge and experience," prior to admission to the more advanced examination of the various surgical specialty boards. It is also this committee's attitude that the university programs should decide how to structure the basic residencies and that the surgical specialty boards should restrict their activities to the development of appropriate basic qualifying examinations.

At the present time, with the exception of Ophthalmology, and Obstetrics and Gynecology, the individual surgical specialty boards appear to be receptive to these concepts with various reservations as regards details.

Work of the American College of Surgeons

For a period of 8 to 10 years the Committee on Graduate Education of the American College of Surgeons has favored development of a plan of basic training in surgery designed to provide a breadth of educational experience in general surgery and the surgical specialties prior to more advanced training in any specialized field of surgery.

After many years of discussion of the pros and cons of implementing such a program, in January 1969, the Board of Regents of the American College of Surgeons agreed to urge that the several American Surgical Specialty Boards be encouraged to develop "in selective institutions on a trial basis, basic surgical training programs which will:

"(1) occupy the first two years following graduation from medical school;

"(2) be organized to accept house officers who might subsequently enter any field of general or surgical specialty training;

"(3) be under the direction of a chairman and the chief of all the involved surgical services;

"(4) be arranged on a flexible, individualized, institutional basis with consideration of the desires of the participating service chiefs and the specific program of the individual residents; and

"(5) place responsibility for the development of the quality of the basic programs in the hands of a university unit with reliance upon the experience and judgment of the service chiefs to provide flexibility in the program."

The Regents of the American College of Surgeons further recommended that the surgical specialty boards develop an examination, based on national standards and conducted by a national group, to test "core knowledge" at the end of the two year basic program or later. The Regents suggested

that this examination might be considered as "qualifying" in the sense that successful completion could be required before the individual could be certified by the Boards which had agreed to participate in the pilot studies.

Structure, Content, Supervision and Implementation

From this summary it seems clear that a strong vector among the forces which influence graduate medical education points to the reorganization of the first two years of post-doctoral education in surgery with the aim of improving the basic clinical grounding and cognitive information of surgical trainees prior to specialization.

The details of structure and content of a basic surgical residency require careful consideration. If it is to provide grounding in fundamental principles of whole surgical care, the basic period must provide clinical opportunities to cope with a wide variety of problems on both general surgical and specialty services.

It is obvious that there must be vigorous collaboration by general surgical and specialty divisions in implementing such a program, and to be successful the basic residency should be as valuable for men who subsequently go into the surgical specialties as for trainees who continue with advanced training in general surgery.

The ad hoc committee on Basic Surgical Education of the Advisory Board for medical specialties has suggested the subjects outlined in Table 1 as representative of the fundamental surgical areas and problems which a trainee should become grounded in by study and clinical experience under appropriate supervision in a basic surgical program. While a critic might suggest that these are subjects which are taught in medical school, he can be readily answered that these subjects are best *learned* in a post-doctoral program based in clinical experience and clinical responsibility. Obviously a list of topics such as is summarized in Table 1 represents only an outlined approximation and should be considered as a guide which should be freely modified, added to and revised both by those responsible for supervision and teaching the basic program and by those charged with structuring a qualifying examination aimed at assessing its value for the surgical trainee.

Suggested List of Subjects to Be Included in Basic Surgical Education

Table 1

1. Wound Healing
2. Bleeding and Clotting
3. Shock
4. Response to Trauma (Stress)
5. Surgical Metabolism and Nutrition
6. Surgical Endocrinology
7. Surgical Anatomy
8. Specific Problems in Trauma
9. Infections and Antibiotics
10. Anesthesia and Respiratory Care
11. Neonatology
12. Surgical Pathology —General Aspects
13. Burns
14. Surgical Psychology
15. Grafting and Transplantation
16. Common Surgical Complications
17. Clinical Pharmacology
18. Resuscitation
19. Surgical Neurophysiology

In addition to the enthusiastic collaboration of all the surgical divisions of a teaching hospital, help in the basic surgical educational program will be required from the Departments of Medicine, Pediatrics, Radiology, Psychiatry, Pathology, and all the basic science groups which are available in the teaching institution. Organization of a continuing program of instruction in the form of seminars and teaching rounds for the trainees as a group in the broader subjects will need to be coordinated with the specific clinical assignments in the basic residency period.

The basic surgical residency period should not consist of a rigid, stereotyped series of assignments which are imposed on the trainee as requirements, but it should provide considerable flexibility so as to allow the trainee a good deal of freedom of choice in selecting rotations.

It has long been my own opinion that the clinical assignments of a two year basic surgical residency might appropriately include approximately 12 months of general surgical experience including the emergency service and approximately 12 months of experience in the surgical specialties, including the possibility of a brief period in surgical pathology or the surgical research laboratory as a substitute for one or more of the clinical assignments. For trainees in basic residency programs who are interested in

going on with further residency training in general surgery, it would seem to be a good plan to provide about half of the general surgical ward work in the first year and the other half in the second year. In this way increasing responsibility in the clinical work on the general surgical services would be assured. However, for a trainee interested in a subsequent career in one of the surgical specialties, a totally different pattern might be considered more effective by the trainee in consultation with the chief of that specific specialty service. A great deal of flexibility in choice of services should be possible for each resident during the basic period with the advice and approval of departmental chairman and the various chiefs of the surgical specialty services who would be responsible for direction and supervision of the basic residency.

By replacing the present 12 months of surgical internship and the following first 12 months of a residency in surgery or a surgical specialty with a well planned 24 month program of basic surgical residency, the length of the rotational assignments to the various services can be extended to minimal periods of 3 to 4 months. This should provide greater depth and concentration of experience for the junior resident in each assignment than is currently provided by the multiple short rotations of most surgical internships and junior residencies.

The schema in figure 1 illustrates the suggested pattern of reorganization of the first two post doctoral years of graduate surgical education and the relationship of the proposed basic surgical residency to more advanced and specialized training. The proposed basic board examination is suggested to assess the qualifications of the surgical trainee after he has completed a *minimal* period of two years of post-doctoral education in surgery. It should not be a prerequisite to the trainee's continuation in or appointments to programs of advanced or specialized residency training, but rather as

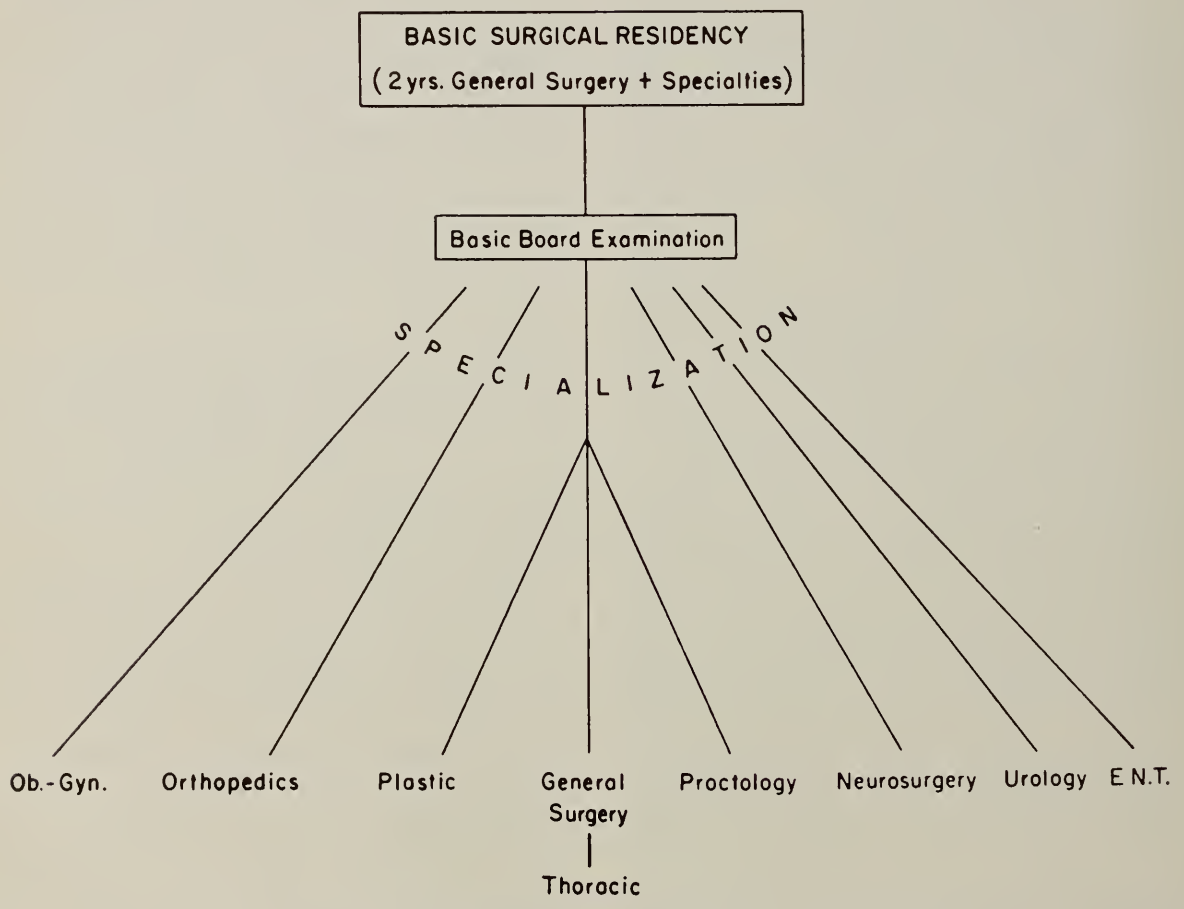


Fig. 1. Schema which indicates the relationship of the proposed basic residency to more advanced and specialized training.

a qualifying examination which the resident should be able to pass before he is accepted for the advanced, certifying examinations of the surgical specialty boards.

As suggested by the Regents of the American College of Surgeons, this program of change in graduate surgical education shoud be tried out initially in a few selected university teaching units before it is adopted.

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* * *

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Comprehensive Health Planning for Rural Areas*

BEN N. SALTZMAN, M.D.,† Mountain Home, Arkansas

In November, 1966, Congress passed PL 89-749 for the purpose of establishing a partnership for comprehensive health planning. This partnership would allow health professionals and those utilizing health services to plan together at a community level. It would provide funding for programs in health care, distribution of health services, and training for new types of health service providers.

The new law combines almost all government funding for health programs under one agency, avoiding the multiple funding sources of the past. It is hoped that this will eliminate waste, reduplication, and overlap of programs. Above all, it asks for local communities to analyze their own health needs and offer plans for solving their health care dilemmas.

The AMA House of Delegates in November, 1967, adopted a report which defined the role of the profession in comprehensive health planning and urged state and local medical societies to participate vigorously in the program. The report concludes that planning, organizaton, and distribution of health facilities and services are a prime responsibility of organized medicine.

It seems especially important for organizations concerned with the health of rural people to be deeply involved with comprehensive health planning groups at all community levels. It is essential for rural leadership to be represented on community health planning councils so that they can speak for rural people and ensure good planning for future health care programs in their communities.

The Council stands ready to provide information and advice to rural groups who may wish to become involved in health planning.

I believe that by this time, you must be pretty well aware that comprehensive health planning is simply supposed to be the orderly process of defining community health problems. It is to concern itself with identifying unmet needs, surveying resources to meet them, establishing realistic and feasible priority goals and then acting. The chief areas of concern in community health planning are personal health and environmental health. Under personal health we deal with acute medical and surgical illnesses, chronic illnesses in adults, mental disorders, mental illness and retardation, child and maternal health which includes family planning and nutrition, infectious and parasitic diseases, accidental injuries and occupational diseases. Under environmental health we find ourselves concerned with water resources, (physical, chemical, biological contamination), air resources, (physical, chemical, biological contamination), food and pharmaceutical resources, ionizing radiation, human settlements and residences, waste disposal and general sanitation.

You are aware that the Federal government has been interested in a health partnership for many years. It began in 1798, with the establishment of the United States Marine Hospital Service. In 1799, the Federal officers were authorized to cooperate with state and local officials in quarantine enforcement and included Marine Hospital physician assistance in civilian epidemics. In 1887, a hygienic laboratory was established for the study and control of disease through research and practical assistance in epidemic control. This laid the groundwork for the National Institutes of Health. In 1893, through a Congressional act, foreign and interstate quarantine was established creating a cooperative relationship with state health departments. In 1902, an act established a Conference of State and Territorial Health Officers with the Surgeon General. That same year, the United States Public Health Service came into being as a substitute for the Public Health and Marine Hospital Service. In 1935, Title VI of the Social Security Act was established authorizing annual grants to the states for health purposes. This was the initiation of what we call the Formula Type Grants. In 1944, the United States Public Health Service was reorganized under a new law, Public Law 4-10, adding grants for tuberculosis control. In 1946, some important grant activities were initiated. These had commu-

*Presented at the meeting of State Medical Associations' Rural Health Committee Chairmen, Philadelphia, Pa. March 20, 1969.

†Immediate Past-Chairman, AMA Council on Rural Health.

nity impact and they included almost everything in the health field. In 1966, Public Law 89-749 came into being. This was the Comprehensive Health Planning and Public Health Service Amendments of 1966. There were three sub-sections of this act, A, is concerned with state level planning including the financing of the same, B, authorizes project grants enabling development of comprehensive health plans at regional, metropolitan or other local levels, and C, authorizes project grants for training, study and demonstrations to improve the state of the art of comprehensive health planning. These are the ones with which we originally concerned ourselves. Now D, concerns itself with remodeling the Public Health Service granting authority for the support of state health programs by merging into one composite sum, monies for categorical grants formerly operative under nine separate authorizations. Fifteen percent of the total assigned to the states would be dedicated to the state mental health programs. Under E, project grants were awarded by the Surgeon General for activities of special nature, studies, demonstrations and training aimed to develop novel approaches to providing health services, with Federal funds to defray part of the cost. And F, provides for an interchange of personnel between Federal and state health staffs depending on the need. This takes care of the law and also indicates that the government is helping provide for certain services.

Many people have asked why do we need comprehensive health planning? Why did it suddenly seem to become necessary and why must we be involved? There has been an increased utilization of health services, almost an explosion, in fact, and the reasons are the following: (1) there are more people, more elderly and more young people; (2) there are more accidents; (3) people are living longer and therefore have more chronic diseases; (4) more people are carrying health insurance and therefore demanding more services; (5) there is a greater affluence and with this affluence people do want health services; (6) our health education is becoming more effective; (7) people are becoming aware that they could be healthier; (8) there has been considerable publicity for the advantages of early diagnosis and comprehensive care and we as physicians are generally responsible for this emphasis; (9) medical care is more effective today and people realize this and therefore want some of it; and (10) there is an increase in urbanization and people are living closer to physicians and so they avail themselves of this opportunity. This does not necessarily apply to the rural practice of medicine. There has been a proliferation of governmental health programs as you well know. There is more purchasing power for services. People can obtain financial help for their health care. Therefore they demand it.

Now, knowing all this, where do we as physicians and leaders in rural health planning fit in? Many physicians feel that the Partnership for Health Act will spell the doom for voluntary health planning. Planning is certainly the name of the game in our country today.

It seems that millions of dollars are being spent on planning. This involves not only Federal funds, but funds of private organizations. There are planning boards, planning committees and planning commissions of every sort and description. We often feel that many of these are unnecessary. But be that as it may, they are here to stay and there isn't much that we can do about it. Our complex society makes planning almost obligatory. Individual initiative is most certainly important. But this initiative must be applied in the planning procedure.

There are dangers, of course, in the planning process. There is the danger that health planning may get into the hands of untrained or inexperienced or nonprofessional individuals. These individuals can be chosen by special interest groups or must meet certain political criteria that do not necessarily apply to the best interests of the consumer or patient. The consumer as a health planner is not often knowledgeable of what is necessary for his own health and that of his fellow citizens. Therefore he cannot really prescribe what comprehensive health planning should be. I have been involved in comprehensive health planning in my State for the past two years. I find that the consumer is a reasonable individual

who is quite willing to state what he thinks is the need and then is also willing to sit back and let the professional or the physician tell him how this need can be met in planning. There is also the danger that the planning can become so broad that no single planning body can be established to handle it. In fact, even at the present time it seems that most states are wandering about hopelessly trying to make head or tail out of the situations into which they have gotten themselves.

We must agree that there must be some health planning. We must agree that there has been improper distribution of health care both in the metropolitan centers and in the rural areas. We must agree that there has been a shortage of all members of the health team including physicians, nurses, technicians and clerks. There has been increasing demand for general practitioners for rural areas all over the country. We know that there are less and less general practitioners coming into being. Those that exist are dying off. There has been improper planning for hospital beds, hospital localities, hospital equipment, distribution of equipment, inadequate staffing and overstaffing. All of these problems require planning.

Although most states have implemented their comprehensive health plans for planning, with the establishment of councils and boards, we still are not sure as to what kind of planning we should be doing and who should be doing it. In the private sector, we have done our best with the limited time we have had available. We have perhaps been efficient in our own domain, namely, the care of our patients, but we have not been able to take care of all the patients and all the problems.

Efforts are being made for the government to take over the total provision of health care. This is not new. This effort has gone on for many years and it has been fought steadily by physicians and by individuals knowledgeable in the disadvantages inherent in Federal control.

Some feel that the government can do a better job of providing the type of solutions necessary to take care of the problems as they exist today. Comprehensive health planning or the Partnership for Health idea has come into being as a means of providing health benefits on both the public and private levels. Hopefully a partnership will exist whereby the Federal government through funding and knowhow will be in a position to help in those areas that need help.

At the present time there is in existence another program known as the Regional Medical Program. This, while it concerns itself primarily with heart disease, cancer and stroke is also concerned with other related diseases. This covers the waterfront. The entire concept of Regional Medical Planning has leaned toward extension of postgraduate education to physicians and other health personnel. Actually, I believe that the Regional Medical Program has made more headway than comprehensive health planning because its scope is limited to the ideas and initiative of people involved in the health professions. The Partnership for Health program has involved both health personnel and the layman or consumer of health care.

You are aware that most states now have some form of comprehensive health planning going on. Some plans are in the hands of the governors of the individual states and others are in the hands of prior existing agencies, such as health departments. You are also aware that the past several years have been spent in planning to plan. Very little of a concrete nature has come out of this activity up to the present time. It seems that the general feeling is that at least five years must elapse before some definite results can ensue.

In addition to the planning which occurs on a state level, there is a regional planning program and a community planning program incorporated into the state comprehensive health plan. Therefore, a state may be divided into regions that have been asked to plan for themselves. These regions in turn have asked the communities of which they consist to create their own plans. It is unnecessary for me to inform you that very little creative planning has come from the rural communities.

My chief reason for speaking on this subject tonight is to urge you as leaders in rural health in your own states to ask the physicians in your states to take the leader-

ship for the planning in their own communities. To be effective, comprehensive health planning must be a grass roots development. The only way an effective program can be developed in the states is for the individuals and the communities of the states to propose and implement plans that meet their needs.

I have frequently heard it stated by physicians interested in comprehensive health planning that at most meetings they are asked to come up with ideas. The consumer knows that he knows very little about health. He believes that health problems belong in the hands of the professional, and there is no one more professional than the local physician. Since the consumer looks to the physician for leadership, it is imperative that the physician provide this leadership; not only because health planning will then be taken out of the hands of the politicians but also because the health planning will then be beneficial to the individual who needs health planning, namely, the consumer. Everywhere I go and to everyone with whom I speak, the statement is the same, "Doctor, it is up to you."

We have been challenged by the health planners all over the country to do something we have always said we can do better than anyone else; and that is provide good health care for everyone. We are not accustomed to planning on a group level. We have always made our plans as individuals. Personally, I feel that we have done a good job in this respect. We all know what happens when the job is turned over to a committee. But, we are being forced to work in committees. Therefore, let's find ourselves in positions of leadership so that we can guide the activities of these committees.

Although, I have been highly critical of the expenditure of funds for planning that is rampant today, I still feel that the money can be spent in a worse manner. At least we have an opportunity to channel these funds in a worthwhile direction. There will be waste and extravagance. This occurs with any trial and error method and despite the high sounding phrases, comprehensive health planning is trial and error.

All the authorities agree that no two communities are alike, no two regions are alike and no two states are alike. Our people and our physicians have to make their own plans. If they are good, they will be incorporated into the regional and state plans; and hopefully will be funded. We must be as jealous of the sums that are being expended as we are of our own funds. We must provide an honest effort, and an enthusiastic one.

Having worked with groups for many years, I have found most people to be very considerate of the physician's opinion and very anxious to help him in whatever program he feels is worthwhile for the community. Each one of you has an opportunity to help in health planning in your own community, region or state. Make this help meaningful and help make comprehensive health planning work.

You are active in what I feel is the most useful and effective committee of our medical societies. Since you hold leadership in this committee, show your colleagues and your communities that you are also leaders in planning for the health of all your people.

It is interesting to note that at a meeting of the Council on Rural Health with its Advisory Committee in September of 1968, a discussion group came forward with the following findings. It emphasized that there is a need for rural community health planning because of the maldistribution of health manpower, the overlapping of agencies and programs, the underutilization of health manpower and health agencies already existent, and a need for the greater use of the health team approach.

In organizing for rural involvement for community health planning the discussion group felt that the Council on Rural Health had the responsibility to involve national organizations together with their state and local counterparts. It felt that we should utilize environmental health planners, schools, colleges, the Cooperative Extension Service, farm and rural youth organizations, rural news media, churches, auxiliaries, etc. It felt that a section concerned with rural areas should be assigned to task forces on comprehensive health planning. It felt that state medical association committees should be organized as task forces on planning. Resources should be made

available for the development of local and area planning councils to help the development of planning for sparsely populated areas.

It is my feeling that the sparsely populated areas are those that deserve the greatest amount of help. We speak of health manpower shortages and we speak generally. However, it is my belief that the greatest shortages exist in the sparsely populated areas and there is where the health planning is needed. Let us therefore concentrate on providing comprehensive health planning for those areas and then using the results as models, go on to bigger and better things.

Comprehensive health planning in the final analysis is your job. Make the best of it.

* * *

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CASE REPORT

Adverse Reaction to the Use of Marijuana

*George W. Marten, M.D., Memphis, Tenn.

The use of LSD seems to be decreasing, especially since the discovery that LSD might have influence on human chromosomes and after many reports of severe adverse reactions observed throughout the nation. However, the use of marijuana increased enormously and spreads from Greenwich Village and hippie areas in San Francisco to college campuses. Lately the smoking of marijuana occurred in many high schools, especially in the metropolitan areas. As such it deserves attention of the medical profession.

A 21 year old college student was referred to me by his relative because of a panic reaction following immediately upon the use of marijuana. The young man in his junior year of undergraduate studies was the son of a prominent professional man in a midwestern city.

From the history it was obvious that his parents were well adjusted and had 6 living children. Several of his brothers and sisters were college graduates, one with a Ph.D. and another with a master's degree. There was no incidence of emotional problems in his family.

The patient hoped to be a college professor and was interested in politics. He also was a member of organizations with progressive political and cultural goals. However, he was far from radical and did not wear a beard or eccentric clothing and had a large number of friends with whom he regularly went to cultural events and lectures and had discussions at home. He was an excellent student, most of the time an honor student, and later became a member of the honor society. He was later accepted into one of the outstanding Eastern colleges for graduate courses.

During his freshman year he was introduced to marijuana and attended regular "smoke-ins" with a few of his friends. Every time during the smoking of marijuana he experienced a pleasant feeling of relaxation and "unity with others and a feeling of friendship with the whole world." One day after at least 70 or 80 such smoke-ins, he developed an acute anxiety which increased into a panic during which he ran wildly down the corridor of the dormitory. He was restrained by his friends and taken to the emergency room of the local university hospital where tranquilizers were administered. He spent one or two days in the inpatient unit of the university hospital and then was discharged. He continued to use tranquilizers because of frequent and repeated attacks of anxiety. It was at this point that he came to see me. He was very remorseful, self-critical and claimed that the pleasant experiences in the past were not worth the feeling he has had since the last smoke-in. Since then he persuaded several of his friends to drop smoking and wanted to begin a crusade against marijuana on the college campus.

When I saw him in my office he was a small but stocky young man in good physical health. He was obviously quite intelligent judging from his vocabulary and use of abstracts. While no thought disorder was detected, he was obviously preoccupied with his recent anxiety experience which he described as overwhelming fear without any content. He did not have hallucinations. He said that he never had had such fear before, not even in a limited degree.

The early history was noncontributory. He had no serious physical illness nor any unusual reaction to the physiologic stresses of life. When I saw him he was extremely tense and complained of frequent incidents of night terrors and violent nightmares and anxiety states coming over him at the most unexpected time of day or night. He used tranquilizers which were only partially effective.

From the history and psychiatric examination it was obvious that this young man had a rather well functioning and strong ego and that his relationships were multiple and satisfying. His attitude to work and to play seemed appropriate for his age and for his social status. The relationship with his girl friend and later his wife appeared very satisfying. They had few disagreements and both were quite productive in their own areas.

I have seen this man several times since the first appointment. During the first six to seven months anxiety attacks interfered with his sleep and with his functioning in school and at social occasions to such a degree that he had to limit his recreation and used sleeping pills and tranquilizers at night time. After about seven months these attacks of anxiety became less frequent but occurred quite unexpectedly in irregular intervals. For example, during a car ride or airplane ride or dancing. On such occasions he interrupted whatever he was doing, went to bed and used tranquilizers. Needless to say, he never returned to marijuana. Today one and a half years after the use of marijuana, he still has occasional outbursts of anxiety at the most unexpected time.

Discussion

With the increase in the use of marijuana, more and more reports of adverse reactions are appearing, especially from large cities such as Los Angeles or New York. The reports call our attention not only to temporary reactions (so-called "bad trips"), but

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also to adverse and very unpleasant reactions of longer duration. Ungerleider and associates[1] report results of a survey of psychiatrists, psychiatric residents, internists, general practitioners and psychologists in Los Angeles County. It was found that among their patients of the past 18 months of practice, in addition to 2000 adverse reactions to LSD, there were also 1800 adverse reactions to marijuana. By adverse reaction to marijuana the authors defined any reaction requiring help by a psychiatrist, psychologist, internist or general practitioner. In conclusion they mention that their findings contradict the former opinions that marijuana is an innocuous drug.

Allen and West[2] reported at about the same time their studies of the effects of marijuana and LSD, learned by joining the hippies in Haight Ashbury, a district of San Francisco in the summer and fall of 1966. They described that the "chronic use of LSD and probably marijuana in large amounts leads to apathy, enervation and psychological immobilization." The authors compare this to a chemical, self-leukotomy, and question whether society should allow an individual to "leukotomize himself gradually with drugs until he feels comfortable even if he does so knowingly."

In a following article McGlothlin and West,[3] describe adverse reactions to marijuana as a panic reaction. They quote Bromberg[4] and the Mayor's Committee on Marijuana in the City of New York, that several cases were reported of marijuana inducing temporary psychosis. The authors also mentioned that personality changes resulting from the use of marijuana can be characterized by "amotivational syndrome." The clinical observation indicates that "regular marijuana use may contribute to the development of more passive, inward-turning, amotivational personality characteristics." They described "a change from a conforming, achievement-oriented" student into "a relaxed careless-drifter" after prolonged use of a significant amount of marijuana. "Apathy, loss of effectiveness and diminished capacity or willingness to carry out complex long-term plans, endure frustration, concentrate for long periods and follow routines or successfully master new material," seem to be the personality changes after prolonged use of marijuana. "Such individuals become totally involved with the present at the expense of future goals, and demonstrate a strong tendency toward regressive, child-like magical thinking."

In the same article the authors[3] mentioned that while present day use of marijuana has not been shown to predispose to the use of heroin, it does play a role in initiation to other potent drugs, particularly LSD. "To the extent that marijuana contributes to a general disregard for realistic consequences of behavior in a young person, its use increases the probability of abuse of other more dangerous drugs." The authors mentioned that the comparison with alcohol is not quite accurate because "alcohol was used most frequently as a relaxant and as an incident of other social activities, whereas, marijuana was used solely as a means of intoxication, i.e., pleasure." While the authors mentioned that the affluent society tends to accept "pleasure in its own right rather than something that needs to be earned as a reward for hard work," they say that possibly one day society will promote the concept of allowing adults the privilege of informed decision to smoke marijuana but that we should definitely protect those "who are too young to make an informed decision," meaning children and adolescents.

Clark and Nakashima[1] conclude that, "similar to LSD the very unpredictability of marijuana on different individuals and on the same individual at different times and under different conditions increases the risk to the user." Keeler and associates[6] describe adverse reaction to marijuana as well as spontaneous recurrences of drug effects in the form of hallucinations of color and design and different other visual or kinesthetic experiences "accompanied by a degree of anxiety, sufficient to constitute a psychiatric emergency."

Walter Bromberg[5] ends an article by stating that the psychiatric profession (and for that matter, all medical professions), "can best serve the public by openly stating the psychic dangers of marijuana and putting the burden of its use or abuse squarely on the shoulders of the users." He also mentioned that, "if rebellion against the square

world is necessary, if hypocrisy and double standards complained of required modification, it is incumbent on the oncoming generation to make these changes on the basis of clear and present need, rather than the space-time-body image distortion of LSD, marijuana, or banana peel extract." Sidney Cohn[7] in a brief communication recommended, "an active effort to teach the individual and society how to enjoy and endure without euphoriants and escapants."

In my psychiatric practice with emphasis on children, adolescents and young adults, I have seen 5 marijuana users, 2 of them from local colleges and 3 from outside college campuses. My experience with them agrees very much with the ideas and observations of the above authors. The patients' age ranged from 19 to 23, 4 were men and one a woman. Of these 5 cases, 2 patients came because of severe recurrent anxiety spells which started with violent panic accompanied in one instance by vivid visual hallucinations and recurrent violent nightmares. In both cases, the marijuana users had had many "smoke-ins" (ranging from 60 to about 120) during which they reported having the most pleasant and satisfying experience until suddenly one dose, apparently not greater than previous doses, produced an experience of violent panic during which the student had to be restrained by his colleagues and taken to the emergency room of the local hospital for treatment and tranquilization. The anxiety spells coupled with nightmares, and in one case hallucinations of a nature similar to the original one produced by marijuana, occurred at regular intervals from 7 to 14 months after the last use of marijuana. In both cases tranquilizers were partially effective in decreasing the intensity of anxious experiences.

It is interesting that the 2 individuals who developed panic and long lasting after-effects were both well functioning "A" and "B" students with no history of previous emotional problems. On the other hand, the 3 other individuals came to my office for reasons other than the use of marijuana. When their use of marijuana became a matter of discussion during the interviews, they reported only pleasant and gratifying experiences. One of the 3 was an overtly psychotic person with a history of good scholastic results but with very disturbed social relationships. Another patient was a borderline psychotic individual who used marijuana daily for more than a year without any adverse reaction. The third was a very neurotic, poorly functioning college student who had been in psychiatric treatment already during his high school years. He also reported only pleasant and gratifying experiences after smoking marijuana regularly for more than a year.

This limited experience would contradict the often held theory among marijuana users that only the emotionally ill users have adverse reactions. At the same time, it would agree with the psychoanalytic theory of free access to the unconscious in a very emotionally ill individual who by means of withdrawal and limitations in their relationships, can tolerate deeply repressed threatening material from their unconscious released by the marijuana. On the other hand, the so-called well adjusted individual (in a conventional sense of the word) might be very threatened by the sudden appearance of threatening unconscious material in the consciousness during marijuana smoking. Such a sudden emergence of unconscious material, which is unacceptable to the individual, might produce panic similar to that sometimes seen in an individual whose severely neurotic maladjustment acutely decompensates into a psychosis under severe external stress.

Summary

This article presents a limited number of marijuana smokers, some of whom have experienced adverse reactions similar to ones described in the quoted medical literature. Since I do not intend these facts to be scientific proof I do not describe the history and findings in all instances in detail. The purpose of the article is only as an informative hint to practitioners concerning conclusions in the recent medical literature and my personal experience concerning the controversial issue which occupies the front pages of popular magazines and TV programs.

Popular communication media often publish reports originating not only from the enthusiasts of "broadening of perception," but also at times from professional men

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who claim that marijuana is "an innocent drug equal to or maybe better than alcohol." Their claim that marijuana is not habit forming, omits the fact that there is a psychologic dependence during which the individual prefers the pleasant mood state caused by marijuana smoking and returns to it especially under stress instead of facing unpleasant reality. The clinical experiences of the authors quoted and my limited experience agree that marijuana is indeed far from being an innocent drug. Its sale to the public should not be permitted until objective research studies with marijuana give more information and confirm or correct present clinical observations of rather serious psychotic-like reactions in marijuana users.

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TMA MEDICAL DIGEST

News of Interest to Doctors in Tennessee

MEDICAID—WHAT'S HAPPENING . . . The Tennessee General Assembly passed the Medicaid law but details of its regulations and implementation has been slow in coming . . . The Medical Care Advisory Committee, The Board of Trustees and the Legislative Committee are communicating closely with state officials. It appears that the program will not be underway before October . . . From time to time, details will be furnished to the TMA membership thorugh the newsletter, "THE TRANSMITTER" . . . A special meeting of the Board, together with the Legislative Committee and other officers, was held on May 25th to further study and consider the Medicaid Program. Details will be furnished as they occur through "The Transmitter" and the JOURNAL.

* * * * *

UP-TO-DATE PHYSICIANS . . . The American Medical Association has established a new program to recognize physicians who participate regularly in continuing medical education . . . When the new recognition program was approved by the AMA House of Delegates at the 1968 Clinical meeting in Miami, among the goals set for it were:

- To provide recognition for the many thousands of physicians who regularly participate in continuing medical education.
- To encourage each physician to keep up-to-date and to improve his knowledge and judgment by continuing medical education.
- To provide reassurance to the public that American physicians are maintaining their competence by regular participation in continuing medical education.

Screening committees are urged for state medical associations by AMA's Committee on Licensure of the Council on Health Manpower. Governmental licensure and certification proposals are multiplying in state legistures.

* * * * *

MAJOR ACTIVITIES . . . In reporting to the House of Delegates at its annual session in Gatlinburg on April 10, the Executive Director reviewed some of the major activities and accomplishments of TMA during the past year . . . These included: Selecting physicians for committees of the Tennessee Health Planning Council, the Comprehensive Health Planning Committee, and the Regional Medical Programs dealing with Heart, Cancer and Stroke . . . Assisting smaller hospitals in seeking accreditation through the Joint Commission on Accreditation of Hospitals . . . Working closely with the fiscal intermediary for Medicare . . . Conducted the yearly visit to Washington with physician representation from the nine congressional districts to meet with members of the House and Senate from Tennessee . . . Expanded the visitation program by officers and trustees to county medical societies . . . Actively promoted community health week . . . Presented the Fifth Biennial State and County Medical Officers Leadership Conference . . . Conducted numerous sessions and discussions with state officials and the Governor pertaining to the establishment of Medicaid . . . Developed and finalized the Code of Cooperation between the TMA and the Tennessee Bar Association . . . Sponsored dinner meetings throughout the state for legislators in the Ten-

nessee General Assembly in order to develop close rapport. These were only a few of the major activities of the Association, its officers, committees and staff during the past year.

* * * * *

MORE ABOUT MEDICAID AT THE NATIONAL LEVEL . . . Secretary Finch has announced HEW will review methods states are using to reimburse MD's, Dentists, and other practitioners who treat patients under Medicaid . . . HEW announced April 15 it would consider a number of alternative criteria for reimbursement under Medicaid, including basing federal payments on local Blue Shield schedules and relative value scale for services not covered by schedules . . . HEW under secretary, Veneman, said use of fee schedules might cut MD payments by 10 to 15 percent saving about $56,000,000 in the next fiscal year . . . The latest announcement said HEW would publish new regulations in Federal Register by July 1.

* * * * *

MALPRACTICE INSURANCE COSTS PHYSICIANS APPROXIMATELY $75,000,000 DURING 1968 . . . but awards to patients totaled only about $18,000,000, said Bernard Hirsh, General Council of the American Medical Association, Carriers paid out $15,000,000 in sales and promotion, and another $10,000,000 was spent on cost of administration, miscellaneous taxes, license fees, and related items attributable to the underwriting of medical malpractice insurance. Loss adjustments, made in awards to the patients, including claims, investigations and legal expenses, totaled $18,000,000. The figures are based on an AMA survey.

* * * * *

THE AMA NEWS* CHANGED TO *AMERICAN MEDICAL NEWS . . . The AMA Board of Trustees in its May meeting, changed the name of The AMA News to American Medical News, redirecting its editorial content to reporting all news of interest to the medical profession . . . And approved signing of statements by officers, trustees, executives and division and department directors, and other selected employees indicating they are not engaged in "conflict of interest" activity . . . Directed coordination of AMA communications to all elements of the medical profession, especially specialty societies.

* * * * *

COMMENTS ON MD FEES . . . Robert J. Myers, Chief Actuary, Social Security Administration, in a recent address stated "the argument that physician fees have increased disproportionately since 1965 in relation to wages and prices have little validity . . . From 1965-1967, physician fees had an increase of 2% or 3% greater than increase in general wages. In 1968 the reverse occurred. Over a span of 10-15 years, these elements had generally increased about the same rate. It is inappropriate to draw definite conclusions from a short time period, and there was very little evidence of any significantly greater increase in physician's fees and in wages from beginning of 1965 to end of 1968".

* * * * *

NEWS YOU CAN USE . . . More than 9% of career decided merit scholar semifinalist (835 out of 9,217) plan to become physicians, a record number . . . 38% plan to enter medicine or an allied profession, another record number . . . 91.2% of all physicians eligible to be members of AMA are members. There are 191,000 MD's in private practice, 10,700 interns, 37,000 residents, 39,000 hospital staff members, 10,500 in teaching institutions, 4,000 in administrative medicine, 12,500 in labs, research and preventive medicine. Present AMA membership is 217,000, an all time high.

Public Service

Communications Legislation

Hadley Williams, Public Service Director

TRUTH IN LENDING LAW MAY AFFECT PHYSICIANS . . . The Consumer Credit Protection Act, adopted by Congress last year, became effective July 1, 1969 and may affect business office procedures of physicians, the AMA reports. The new law calls for a statement of finance charge and annual percentage rate on bills to patients. The Federal Reserve Board, in a booklet outlining regulations, states that the law "applies to doctors, dentists and other professional people, and hospitals." Paul Rand Dixon, chairman of the Federal Trade Commission, says "You are affected by this legislation if any finance charge is or may be payable or if the credit is repayable in more than four installments. If you extend credit only through using the services of an independent credit card company, and are not involved in any way with the opening of accounts, the imposition of any finance charge or the bill of the consumer, then you have no disclosure obligation." The AMA Law Department is studying the regulations, and point out that it is unethical for physicians to charge interest. However, attorneys say that if no finance charge is imposed or if the account is not payable in four or more installments pursuant to an agreement between the physician and his patient, then the regulation has no application. Physicians who agree to an account being paid in four or more installments should familiarize themselves with the regulations. The booklet, "What You Ought to Know About Federal Reserve Regulation Z, Truth in Lending-Consumer Credit Cost Disclosures" is available from the U. S. Government Printing Office.

* * * * *

HEALTH CARE COSTS . . . There are indications that future changes in health care costs will not be as great as in recent past. Physician fees, for example, increased 5.6% during 1968, compared with 7.1% in 1967, 5.8% in 1966. Increases in hospital costs were 13.2% during 1968, 19.1% in 1967, 9.6% in 1966. (Source: Consumer Price Index)

* * * * *

CHIROPRACTIC LEGISLATION . . . Twelve separate pieces of legislation were introduced in the Washington State legislature and all twelve were defeated despite the fact that a chiropractor serves in each house. The dozen bills included proposals to include chiropractors in commercial insurance programs, accepting reciprocity with the National Chiropractic Board for Licensing, giving chiropractors title of "Dr.", and reorganizing chiropractic disciplinary board. Other states report rash of legislative proposals by chiropractors. Now is the time for Tennessee physicians to discuss the cult of chiropractic with members of the Tennes-

see General Assembly during the interim between legislative sessions. A bill to equate chiropractors with physicians is pending in Senate committee and has successfully passed the House.

* * * * *

GUIDELINES FOR SEX EDUCATION . . . Much of the current controversy in sex education could be eliminated if practical guidelines are followed, according to the AMA. In making this observation, the AMA has reiterated its long-time stand in support of sex education for children and youth. A basic concept advocated by the AMA is that in the schools, sex education should not be a separate course, project or program. Rather, it should be an integral, important aspect of the overall health education program. Basic responsibility for sex education belongs to the home, the AMA emphasizes in its guiding principals. But the church, the school, and some other community agencies have supplementary roles. Those planning sex education in the schools should involve as many representative segments of the community as possible in planning and carry out the effort, the AMA says, adding: "Persons involved in supporting efforts of the home through sex education in churches, schools, and other appropriate agencies must be exemplary individuals who are carefully selected and properly prepared . . ." Materials used in such instruction, the AMA further notes, must be carefully selected for the institution and child, general and educational suitability, physiological and psychological accuracy and appropriateness, and community acceptance in terms of local conditions, customs, and traditions. Physicians are increasingly aware of the need for counseling in sex education of patients in this area. More than a million copies of the AMA's booklets on sex education have been distributed to date—at cost.

* * * * *

NEW DEVELOPMENTS REGARDING PROFESSIONAL CORPORATIONS . . . On May 1, 1969, the Court of Appeals for the Sixth Circuit, which includes Tennessee, held in O'Neill v. U.S. that an Ohio professional association was entitled to corporate status for Federal tax purposes. Eight U.S. District Courts and two U.S. Circuit Courts of Appeals have now held that the Treasury Department's regulations are invalid insofar as they require a corporation or association created under state law to be treated as something other than a corporation for Federal tax purposes. HR 173, now pending in Congress proposes to amend the present definition of "corporation" in the Internal Revenue Code to include professional associations or corporations organized under the laws of any state. Physicians are encouraged to write their Congressmen to support this Bill which is now before the Ways and Means Committee. It appears that at least one person interested in professional corporations has received a letter from the Internal Revenue Service stating that "Examining activity" in the cases of professional associations or corporations has been suspended. Some experts believe that deductions claimed for benefits derived from professional associations or corporations are not currently being challenged. The Law Division of AMA, however, cautions that the tax advantages of corporations should be carefully weighed against disadvantages. Inconveniences, costs of maintaining a corporation for small groups may outweigh tax savings. Any group contemplating corporation should start with its own attorney. Some financial advisors and attorneys, encouraging MD's to set up corporations, may be motivated by selfish reasons—mainly fees.

TMA

SPECIAL ITEM

The following is the current version of the Code of Cooperation between the Tennessee Medical Association and the Tennessee Bar Association. This Code was developed through a joint effort of TMA's Interprofessional Liaison Committee, Chaired by Dr. William H. Edwards, and the TBA's Interprofessional Code Committee. The Code will be printed in pamphlet form and distributed to the TMA membership at a later date.

INTERPROFESSIONAL CODE OF COOPERATION BETWEEN THE TENNESSEE BAR ASSOCIATION AND THE TENNESSEE MEDICAL ASSOCIATION

PREAMBLE

Realizing that a substantial part of the practice of law and medicine is concerned with the problems of persons who are in need of the combined services of an attorney and a physician and that the individual problems in these circumstances are best served by the cooperative efforts of all concerned; We, the members of the Tennessee Medical Association and the Tennessee Bar Association, do adopt and recommend the following Code of Cooperation as standards of proper conduct for physicians and attorneys.

This Code recognizes that with the growing inter-relationship of medicine and law, it is inevitable that physicians and attorneys will be drawn into steadily increasing association, however, the Code is not necessarily of a binding character nor can it be so detailed as to cover every circumstance.

The Code is not intended to supersede or transcend the rule of law and standards of legal and medical ethics governing each of the professions individually but is intended as a guide to physicians and attorneys in service to their patients and clients.

ARTICLE I
MEDICAL REPORTS

Section 1. GENERAL

Since the vast majority of personal injury cases are settled out of court on the basis of medical reports, such reports should be comprehensive.

It is the Doctor's responsibility to comply as fully and promptly as possible with the request for a medical report. Undue delay in providing medical reports bearing upon a patient's legal rights, may prejudice his case.

If upon receiving a request from an attorney for a medical report a physician is unable to make a complete medical evaluation, he should notify the attorney. In this event, a preliminary report clearly designated as such may serve the patient's needs until a complete evaluation can be made.

Section 2. CONTENTS OF REPORT

The physician's report should include a complete medical history, clinical findings, test results, diagnosis, treatment and prognosis, if possible. See Annex B for suggested areas of response.

Section 3. THE ATTENDING PHYSICIAN

a. Records:

The medical records of a patient, especially when the latter has been injured in an accident, may be used in a lawsuit to support or rebut the physician's testimony as a witness; therefore, complete and accurate records should be maintained at all times.

b. Request for Report:

When a medical report is desired by a lawyer, he should submit a written request therefor to the attending physician accompanied by a signed authorization (See Annex A for suggested form) from the patient-client for the release of the information. The request should be sufficiently specific to insure that the physician gives the desired information. The request may be in the form set forth in Annex B., hereto.

c. Physician's Report:

The physician has the obligation to cooperate with his patient's lawyer and should forthwith complete and forward the requested report, substantially in

the form set forth in Annex B., hereto. The report should be clear and concise and should contain specific responses to specific inquiries as well as any other information the physician may consider pertinent and necessary to the lawyer's proper evaluation of the client's case.

It is improper for the attending physician to give written or oral reports concerning his patient to attorneys, adjusters or investigators representing parties whose interests are adverse to those of the patient without express signed authorization from the patient, except that, in Workmen's Compensation cases a physician may furnish to the employer or the insurer a complete medical report as to the claimed injury and its effect upon the employee, without the employee's consent.

The patient, or his laywer, shall be entitled, upon proper authorization, to the report irrespective of whether a third party or agency is made responsible for medical care and compensation, or whether an insurance carrier or third party has contracted to assume financial responsibility.

Section 4. THE EXAMINING PHYSICIAN

a. General:

The "examining physician" (consultant) as used in this Code, differs from the "attending physician" in that he does not prescribe treatment and is not necessarily expected to testify at the trial. His examination is normally made at the request of the lawyer for one or both of the parties. Professional courtesy would indicate that an attorney notify the attending physician when arranging for an examination of such physician's patient by another physician, except where a Court order has been obtained requiring the plaintiff to submit to a physical examination, and in such cases the attending physician should be notified of the order.

b. Request for Examination and Report:

Where the examination is made at the behest of either party, a written request should be sent to the physician, by the lawyer asking for the examination and stating the nature of the examination desired. Specific information should be requested.

c. Appointments:

When an appointment is made for the medical examination of a person, the physician schedules a portion of his time for that purpose. It is, therefore, imperative that lawyers exert their best efforts to insure that such appointments are kept or that the physician is notified of inability to do so, well in advance.

d. Report of Examination:

The examining physician's report should be sent promptly to the lawyer requesting the examination. It should not be sent to adversary counsel, except upon authorization of the lawyer requesting the examination, or by agreement or by order of the court.

The report should be clear and concise and responsive to the elements enumerated in the lawyer's request.

e. Records:

The examining physician should prepare, keep and preserve full and complete records of his examination and diagnostic findings.

ARTICLE II
CONFERENCES

Section 1. GENERAL

Professional courtesy to the physician and duty to the client demand that the lawyer confer at appropriate stages with the physician and similar considerations demand that the physician recognize the necessity for one or more conferences and make himself available at a mutually convenient time. The physician and lawyer are burdened with a heavy schedule of daily activities and neither should make unreasonable demands upon the other but should yield to the dictates of ordinary civilities and strive to adjust their activities in such a manner as to produce minimum inconvenience. Absent and unforeseen emergency, it is an act of discourtesy for either to keep the other waiting, for an appointment, for a conference, deposition or any other engagement.

Section 2. PRE-DEPOSITION AND PRE-TRIAL CONFERENCES

It is the duty of each profession to present fairly and adequately the medical questions involved in legal controversies. To that end, pre-deposition and/or pre-trial discussions between the physician and the lawyer should be arranged in order that they may have a full and frank discussion of the pertinent medical and legal issues. It is grossly unfair to the physician, the lawyer and the patient-client to undertake to offer medical testimony without the advantage of such a conference.

ARTICLE III
THE PHYSICIAN AS A WITNESS

Section 1. TESTIMONY BY DEPOSITION

a. Deposition Defined:
A deposition is an official proceeding authorized by law whereby a person, such as a physician, may be required to give testimony and be cross-examined under oath outside of court, before a Notary Public and in the presence of attorneys representing the parties. He may be required to produce relevant medical records at the deposition hearing. He may also be required to release these records, X-rays, ECGs, EEGs, etc. to the Notary Public for duplication and return.

b. Time and Place:
The time and place of the deposition should be fixed by agreement. Unless there is a compelling reason to the contrary, it should be taken at the physician's office. The lawyer should present himself promptly and the physician should be available at the agreed time.

c. Subpoenas:
Because of conditions in a particular case or jurisdiction or of the necessity for protecting the interests of his client, the attorney may find it necessary to subpoena the physician as a witness.

d. Subpoenas—Medical Records:
Production of relevant medical records may also be required by subpoena served on the physician or the custodian of his records. If so, the records must not be delivered or disclosed to the process server. The subpoena requires the person served to attend the deposition at the time and place stated in the subpoena and there to produce the specified records. It is improper for a process server to obtain possession of subpoenaed records; it is also improper for a process server to state that it will not be necessary for the physician to attend the deposition hearing described in the subpoena if the medical records are surrendered for copying or otherwise.

e. If Attendance at Deposition a Hardship:
If the time and place described in the subpoena for the deposition hearing creates a hardship, the physician should immediately bring this fact to the attention of counsel taking the deposition.

Section 2. THE PHYSICIAN IN COURT

a. Duty to Testify:
Our system of justice depends upon being able to require any citizen's attendance at a judicial proceeding and to give testimony regarding the case. A physician must respond to a subpoena in criminal cases and in the federal courts as any other citizen except where a grave emergency prevents his doing so. The same obligation exists in all other cases unless the physician claims his exemption in the manner provided by law. To obtain the benefit of his exemption the physician must notify the officers serving the subpoena that he is a physician and that he claims his exemption. Failure on the part of the physician to so comply with the statute voids his exemption and he is required to appear in court as commanded by the subpoena unless, upon application made to the Judge before whom the case is set, he is excused.
Notwithstanding the above, it is incumbent upon lawyers to recognize that court appearances operate to deprive the physician of valuable and sorely needed time. Moreover, there are many cases of personal injury wherein the injuries lie within the common knowledge of the layman (e.g., simple fractures, where there is no residual disability) and therefore the appear-

ance of the physician serves no useful purpose. However, in those cases involving serious injury, complicated procedures and/or permanent disability, the personal appearance of the physician is highly desirable, if not indispensable.

Lawyers and physicians are enjoined to approach this problem on a mutually fair basis and to arrive at an understanding which will facilitate more complete justice which is the historic object of all court procedures.

b. Subpoenas for Trial:

Attorneys subpoena medical witnesses because:

1. It may be desirable in a particular case for the physician to appear and testify in person, if asked, pursuant to a subpoena; or
2. It may be essential in order to secure a continuance if for any reason the physician fails to appear as required.

A physician therefore, should not take offense at being served with a subpoena.

c. Arrangements for Court Appearances:

In arranging for the attendance of a physician at a trial the lawyer should always give due regard and consideration to the professional demands upon the physician's time. Accordingly, it is the duty and responsibility of the lawyer, before the trial:

(1) to give the physician reasonable notice in advance of his intention to call him as a witness,

(2) to arrange for the physician's voluntary attendance or to advise him of his intention to have a subpoena issued, if either the physician or lawyer deem this necessary or desirable,

(3) to advise the physician of the date, approximate time and place of his testimony,

(4) to advise the physician to bring with him such records as will be needed for the proper presentation.

During the trial, the lawyer is obligated, as a matter of courtesy:

(1) to call the physician after the trial has commenced and thereafter, as the trial progresses, and give him his best estimate of the approximate time he will take the witness stand,

(2) to call the physician to the witness stand as promptly as possible after his appearance.

ARTICLE IV
COMPENSATION OF PHYSICIAN

Section 1. GENERAL

One of the more important causes of conflict between the medical and legal professions is the non-payment of fees for the services of a physician as a medical witness or an expert medical evaluator. While instances of nonpayment are rare, they are common enough in some localities to arouse strong feelings.

It, therefore, behooves both the legal and medical professions to reevaluate their respective practices in this critical area.

Recognizing that the establishment of fee schedules applicable on a statewide basis would not be equitable, these guidelines are necessarily broad in scope and generalized in nature. They require sincerity of application and forthrightness of interpretation by our respective professions in the pursuit of the standards herein established.

Section 2. COMPENSATION MUST NOT BE CONTINGENT

Under no circumstances may a physician charge or accept compensation for any service which is contingent upon the outcome of a lawsuit.

Section 3. COMPENSATION FOR REPORTS

a. By an Attending Physician:

The attending physician is entitled to charge a reasonable fee for the preparation of narrative reports:

b. By an Examining Physician:

The compensation of an examining physician rests principally upon contract or is determined by custom and past practice.

As a guideline, however, the examining physician should charge for the reasonable value of his services so rendered on the same basis as if his services were

not rendered to a patient involved in litigation, or should make such charge as is customary in his particular field or medical specialty.

If there is any question as to the charge, it should be discussed and an agreement reached prior to the rendition of the requested services.

Section 4. CONFERENCES AND CONSULTATIONS

The physician is entitled to charge fair and reasonable compensation for time expended in conference or consultation with the lawyer and in preparation therefor, provided, however, this charge should be consistent with the customary charges made by the physician in his practice.

Section 5. DEPOSITIONS AND COURT APPEARANCES

The physician is entitled to charge fair and reasonable compensation for depositions and court appearances.

A lawyer should not request a physician to testify by deposition or in court, nor should he subpoena him without making arrangements for reasonable compensation. Unless a course of dealings has been established between the lawyer and physician the matter of compensation should be arrived at by conference in advance of the deposition or trial.

Section 6. RESPONSIBILITY FOR PAYMENT

It shall be the obligation of the lawyer to take all reasonable steps and to make every reasonable effort to insure that adequate arrangements are made for the payment, by the client, of all compensation of attending physicians for services rendered in connection with litigation. This shall include reports, conferences, consultations, depositions and trial appearances.

The payment of an examining physician's fee for the examination and report and subsequent depositions or court appearances, is the obligation of the attorney requesting such an examination.

Annex A provides a suggested solution to the matter of the compensation of physicians by the simple expedient of obtaining the client's authorization to pay the physician's compensation out of the proceeds of any recovery.

This procedure is to be encouraged.

ARTICLE V

ADMINISTRATION OF CODE AND GRIEVANCE PROCEDURE

The Tennessee Bar Association and the Tennessee Medical Association, by appropriate action, shall appoint or designate six (6) members from each Association (two from each Grand Division of the State.) The twelve (12) members so selected shall be known and designated as the "Medico-Legal Code Committee."

Two (2) of the initial members from each Association shall serve for one (1) year, two (2) for two (2) years and two (2) for three (3) years; thereafter, members shall be appointed for three (3) year terms.

The Chairmanship of the Committee will rotate annually between the two professions, with the Committee selecting its own Chairman. There shall be a Vice-Chairman from the Association not having the Chairmanship.

The Medico-Legal Code Committee shall:

a. Meet upon call of the Chairman, or upon call by any five (5) members.

b. Promulgate such suggestions as may be necessary to carry into effect the principles hereby adopted.

c. Attempt to mediate and arbitrate, on a local level, any disagreement arising between individual physicians and individual lawyers, and to this end, the Committee is authorized to sit in sections of four (4) members each (one section from each grand division of the state), and to hold such hearings at such times and places as the section may deem appropriate.

If the foregoing procedure shall not result in a satisfactory settlement or adjustment of the dispute, any dissatisfied party, or the section itself, may request a hearing before the full committee.

If the hearing before the full committee does not resolve the controversy, the Chairman of the Committee shall certify the facts to the Board of Governors of the Tennessee Bar Association and the Board of Trustees of the Tennessee Medical Association, for such action as may be appropriate.

d. Report annually to each Association

the activities of the Committee during the year and make such recommendations as the Committee considers proper.

CONCLUSION

Each profession is obligated by its own stature to respect and honor the calling of the other. One who has chosen to be a physician or an attorney and has been found competent to be such by appropriate authorities is vested with high responsibilities and privileges to enable him to serve the public with honor, with dignity, and with effectiveness.

These standards of practice are intended as a guide to the attainment of the best in interprofessional conduct and practice. They are not necessarily of a binding character, nor can they be detailed to cover every circumstance. It is hoped, however, that every physician and attorney practicing in Tennessee will abide by the spirit as well as the letter of these principles.

County medical societies and bar associations are strongly urged to implement these standards by adapting them to local situations.

ANNEX A

Suggested form of Authorization

I, ..., hereby authorize and direct ....., my attorneys, to pay, from the proceeds of any recovery in my case, to Dr. ..... the reasonable amount for professional services in the treatment of injuries sustained by me and/or my wife and/or my child or children, as the case may be, in an accident which occurred on ....., 19..., said payment to include professional services heretofore rendered and those rendered to the time of the settlement or other disposition of my case for the treatment of said injuries, and fees for reports, conferences, depositions and/or testifying in court.

I understand that this, in no way, relieves me of my personal responsibility to pay all such medical charges.

I further authorize said Doctor to furnish my said Attorneys with any reports he may request in reference to my injury, arising out of an accident on ..... (date) and to allow them to inspect and copy any records, charts, papers or documents pertaining to my medical history and treatment in connection with such injury.

Signed .....

ANNEX B

Request for report from attending physician, and suggested areas of response

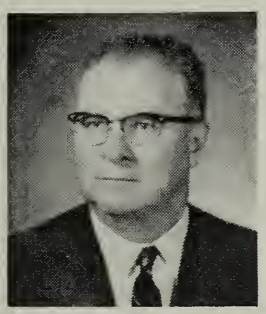
The lawyer's request to the attending physician may elicit information with respect to the following:

1. History of the occurrence leading to the injury or condition, as given by the patient to the physician.
2. Pertinent subjective complaints.
3. Past medical history.
4. Pertinent objective findings.
5. The diagnosis.
6. Interpretation of X-rays, electroencephalograms, electromyograms, and any and all other pertinent data used in the treatment and diagnosis.
7. Treatment rendered.
8. The physician's opinion as to whether there is permanent residual from an injury or condition and, if so, the extent thereof.
9. The prognosis.
10. The physician's opinion as to the necessity for further medical or surgical treatment; or for reexamination.
11. The cost of treatment to date and the estimated cost of future treatment, if such is required.
12. Any other pertinent information.

It is suggested that the report submitted by the physician contain this information.

President's Page

MEDICAID—TITLE XIX IN TENNESSEE



Francis H. Cole

The Tennessee General Assembly in its closing hours adopted the bill implementing Title XIX in our state. Several amendments to the bill were vigorously opposed by TMA, and in each of these a compromise was reached which appears to be workable. We persist in the belief that Title XIX is a bad law, and that medical care to the poor could be provided more efficiently and at less cost by a revision of conventional and traditional clinic services, but these changes must await amendments to the law on the national level. Meanwhile, $49,000,000 is available to help finance medical care to our indigent ill, and, whatever our philosophic concern, this amount of money used wisely can be of tremendous benefit to the people of Tennessee.

The Tennessee Public Health Department is making every effort to see that the administrative aspects of the law are as simple as possible. The efficient use of this money depends on Tennessee physicians, who, while directly receiving less than one quarter of the funds, will, by authorizing hospitalization, drugs, laboratory studies, x-ray, and the other modalities of patient care, control the disbursement of almost all of the money.

Although $49,000,000 is a large sum, it will not be enough to do the job envisioned in the law. In every single state, the money has given out before the year is completed. Appropriate committees of TMA, the Board of Trustees, and the Officers are in frequent communication with the administrative agencies in attempting to work out methods to insure that the program accomplishes as much as it can for as many as it can. Absolute individual integrity of physicians is mandatory. Methods of utilization control by peer review must be re-inforced to contend with the occasional offenders and with the few physicians who habitually over-treat and over-charge their patients. A physician who over-treats or over-charges for his services is guilty of unethical conduct and is liable to medical society discipline—either censure, suspension, or expulsion. This ethical canon applies regardless of any third party payment plans involved in the matter whether they are family members, insurance companies, or government agencies. We must discipline ourselves. We must direct our energies toward the care of the sick regardless of our irritation at the intrusion of bureaucratic rules and regulations into our activities. Over utilization, over charging, poor treatment of patients will come to light. The private individual enterprise system of medical care can be totally destroyed in the flood of unfavorable publicity that will result when such unethical activities are headlined in the public press.

Sincerely,

Francis H. Cole, M.D.

President

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JULY, 1969

EDITORIAL

Emergency Room Medicine— A New Specialty

A new phenomenon has been evolving before our eyes. For some years the emergency room of community hospitals has been undergoing a rather amazing change.

The emergency room in any city hospital several decades ago was the place to which the ambulance sped with the injured, the drunken or the acutely ill person found on the street, in the eating place, the rooming house or hotel. It was the place to which persons brought their friends to have lacerations stitched up after a brawl, or the place where the ambulant derelict who had no personal physician might get help. Others of the poor who could not afford the cost of a house call by a doctor went to the emergency room because of acute episodic illness —appendicitis, renal colic or the like. Too, every emergency room of the city hospital had its periodic visitors hoping to obtain a narcotic "shot," when this was in short supply, by a feigned illness.

At the same time in history, the patient who could afford it called his family physician who came to see him, day or night, to diagnose and then to treat him symptomatically, or to send him to the hospital for treatment, whether medical or surgical.

In the smaller city where there was no city hospital the injured was taken to a community hospital where the nurse called the patient's doctor, or a doctor who came to care for him, and the hospital hoped it might collect the bill if the patient needed to be admitted. The person ill in the home was seen there, as I well remember, whether he could pay or not, though in the daytime might be "talked" into going to the doctor's office.

Then gradually the pattern of medical care changed. Technologic advances gained a primacy over the usual physical examination. The pain in the chest demanded an electrocardiogram or a chest film by apparatus which did not fit into the black bag as did the stethoscope. The pain in the belly demanded a white blood count, a plain film or some special form of examination, and above all careful observation under the watchful eyes of a nurse in the ensuing hours. So now when the patient called his doctor he was told to go to the emergency room of the community hospital where the doctor would meet him and use the facilities now available to aid in diagnosis. In the larger city, if the private hospital had a house staff the patient was instructed to go to the emergency room, an intern or resident was called to await the patient's arrival and after evaluation call the attending doctor who then made a telephonic decision to see him then or in the morning. Again in the larger city, if the patient could not afford a private doctor and the city hospital had a house staff he was told to go to this emergency room. In either event injections of epinephrine or aminophyllin, or other treatment eased the patient and was cheaper than a house call.

Then other factors began to add additional reasons for increased activity in the emergency room. Doctors began to be too busy to make house calls. An hour out of

the office to make a house call not only was expensive in time and dollars, but also deprived probably four patients of his attention while they cooled their heels in his waiting room. Patients learned they could not afford to lose time from a half-day's work while they waited in the doctor's office. So, for the first instance, the physicians sent patients to the emergency room, and in the second instance the patients began to think of the emergency room as an evening or off-hour outpatient service.

And by now the emergency room had become an all-purpose outpatient or ambulant service in which everything was managed from fractures and lacerations to sick babies, would-be suicides, alcoholics, and patients having angina pectoris, acute respiratory infections, asthma, cardiac failure and any and all diseases with few exceptions. In many larger community hospitals the visits total 15,000 to 40,000 per year.* Across the country the load is increasing from 5 to 20 per cent annually.

How to cope with this expanding problem —a "headache" alike to the hospital administration and to the attending staff! In the teaching hospitals the interns and residents, even if with a full complement, rebelled at the load and properly so if it interfered with their learning experience. If the house staff positions were only partly filled, the hospital administrators attempted to manage the load with "moonlighting" help from house staff personnel recruited from more fortunate hospitals.

Eventually the emergency rooms were filled with patients of many of the attending staff, and in the absence of a house staff the staff physicians needed to "take turns" in staffing the emergency room often to the detriment of the patient—the medical man caring for a surgical problem, and a surgeon for a medical problem, even though representatives of other disciplines were "on call." Within a few years it became apparent that these maneuvers were but stopgaps—the trend and patient load were increasing because of extension and multiplication of the reasons for emergency room care.

Doctors began to take on full time responsibility for emergency rooms,—middle aged men retiring from practice to be able to live the more routine life of an 8-hour day, young men on a part time basis while developing a practice, and other young men as a career which provides regular hours.

And this story has led us now to the new specialty—the Emergency Room Doctor—a specialist in general medicine, a challenging practice moving from a fractured hip, to a peptic ulcer, to a foreign body in the bronchus of a youngster, to renal colic, to a placenta praevia, to a myocardial infarction or bacterial meningitis—much more exciting than hum-drum office practice—a place where the action is! Certain university hospitals are offering training for this field.

As was to be expected an organization is being formed, the American College of Emergency Room Physicians. And thus a new specialty has been born.

R.H.K.

*The population of Nashville in 1950 was 321,578, and in 1964 was 399,743. Total visits to the Emergency Rooms of Nashville hospitals in 1950 were 19,632; by 1956 they were 59,173; by 1961 they were 89,183; and by 1964 the total was 100,144. This represented a per cent change of 560%. Though 8 hospitals were reporting, 3 carried 90% of this load. (Statistics collected by Mr. Robert P. Brueck, Executive Director of the Nashville Metropolitan Health and Hospital Planning Council.)

PROGRAMS AND NEWS OF MEDICAL SOCIETIES

Marshall County Medical Association

Dr. Harrison Shoulders, president, presided at the Society's monthly dinner meeting on May 19th. The meeting was held at the Southland Restaurant in Lewisburg. The guest speaker for the evening was Dr. Robert Roy of Nashville who discussed "Immunoglobulins and Their Relationship to Infectious Diseases and other Chronic Disorders."

Knoxville Academy of Medicine

The regular monthly meeting of the Knoxville Academy of Medicine was held June 10th in the Academy building. Dr. George L. Gee, Jr. moderated a panel dis-

TENNESSEE VALLEY MEDICAL ASSEMBLY

(Sponsored by the Chattanooga and Hamilton County Medical Society, Inc.)

MEMORIAL AUDITORIUM, CHATTANOOGA TENNESSEE

Monday, October 13, and Tuesday, October 14, 1969

17TH ANNUAL ASSEMBLY

Monday, October 13, 1969

7:30 REGISTRATION BEGINS

9:00 ALTON OCHSNER, M.D., President, Alton Ochsner Medical Fdn., New Orleans, La., *"The Present Status of the Treatment of Cancer of the Lung"*

9:30 N. C. HIGHTOWER, M.D., Dir. Scott-White Mem. Hospital, Temple, Texas, *"Esophageal Motor Disorders of Clinical Importance"*

10:00-10:30 INTERMISSION—REVIEW EXHIBITS

10:30 DANIEL W. ELLIOTT, M.D., Clin. Prof. of Surg., Univ. of Pittsburgh, Pittsburgh, Pa., *"New Methods in the Diagnosis of Pancreatic Disease"*

11:00- NORMAN E. LEVAN, M.D., Prof. of Medicine, Chrmn., Sect. of Dermatology, Univ. of So. Calif., Los Angeles, Calif., *"Cutaneous Manifestations of (or Clues to) Diabetes Mellitus"*

11:30 L. W. DIGGS, M.D., Goodman Prof. of Medicine, Univ. of Tennessee, Memphis, Tenn., *"Practical Points in the Diagnosis of Hemorrhagic Disease"*

NOON Luncheon Symposiums—$4.00
(Limited to 85 physicians per symposium)
(Tickets must be obtained prior to assembly)

Symposium No. 1 "SOME ASPECTS OF OPERABLE CANCER"
Guest Panelists: G. A. HALLENBECK, M.D.
ALTON OCHSNER, M.D.
Moderator: FRANK B. GRAHAM, M.D.

Symposium No. 2 "HEART DISEASE, PAST, PRESENT AND FUTURE"
Guest Panelists: PAUL DUDLEY WHITE, M.D.
HELEN B. TAUSSIG, M.D.
SOL SHERRY, M.D.
Moderator: DAVID P. MCCALLIE, M.D.

2:00 G. A. HALLENBECK, M.D., Dept. of Surg., Univ. of Ala. Med. Center, Birmingham, Ala., (Prof. Emeritus, Mayo Clinic), *"Tissue Transplantation: Principles and Current Status"*

2:30 HELEN B. TAUSSIG, M.D., Prof. Emeritus of Pediatrics, Johns Hopkins Hosp., Baltimore, Md., *"Long Time Observations on the Tetralogy of Fallot"*

3:00-3:30 INTERMISSION—REVIEW EXHIBITS

3:30 J. B. LYNCH, M.D., Assoc. Prof. of Surg. (Plastic and Maxillofacial), Univ. of Texas Medical Branch, Galveston, Texas, *"Current Concepts of Burn Management"*

4:00 PAUL DUDLEY WHITE, M.D., Emeritus Clin. Prof. of Medicine, Harvard Univ. Med. School, Boston, Mass., *"How Long Should We Live"?*

Tuesday, October 14, 1969

8:00 REGISTRATION

9:30 SOL SHERRY, M.D., Prof. and Chrmn., Dept. of Medicine, Temple Univ., Philadelphia, Pa., *"New Developments with Antithrombotic Agents"*

10:00 MAYNARD I. SHAPIRO, M.D., Pres., American Academy of General Practice, Kansas City, Mo., *"The New Family Physician"*

10:30 INTERMISSION—REVIEW EXHIBITS

11:00 ROBERT B. WILSON, M.D., Prof. Clin. Obstetrics and Gynecology, and Head of Sect., Obstetrics and Gynecology, Mayo Clinic, Rochester, Minn., *"Endocrine Contraception"*

11:30 F. E. GREIFENSTEIN, M.D., Prof. and Chrmn., Div. of Anesthesiology, Univ. of Arkansas, Little Rock, Ark., *"Anesthesia in the Geriatric Patient"*

NOON Luncheon Symposiums—$4.00
(Limited to 85 physicians per symposium)
(Tickets must be obtained prior to assembly)

Symposium No. 3 "SKIN DISEASES IN THE GENERAL PRACTITIONER'S OFFICE"
Guest Panelist: NORMAN E. LEVAN, M.D.
Moderator: CLARENCE SHAW, M.D.

Symposium No. 4 "NEW DEVELOPMENTS IN THE DIAGNOSIS AND TREATMENT OF LEUKEMIA"
Guest Panelists: L. W. DIGGS, M.D.
RICHARD P. SCHMIDT, M.D.
Moderator: JOHN W. ADAMS, JR., M.D.

2:00 LUIGI MASTROIANNI, JR., M.D., Prof. and Chrmn., Dept. of Obstetrics and Gynecology, Univ. of Pennsylvania, Philadelphia, Pa., *"Oogenesis and Ovulation: Some Practical Considerations"*

2:30 RICHARD P. SCHMIDT, M.D., Assoc. Dean, Univ. of Florida College of Medicine, Gainesville, Fla., *"Profiles of Headache; Diagnosis and Treatment"*

3:00-3:30 INTERMISSION—REVIEW EXHIBITS

3:30 JACK C. HUGHSTON, M.D., Orthopaedic Surg., Columbus, Ga., and Chrmn., Comm. on Sports Medicine. Am. Acad. of Orthopaedic Surgeons, *"Knee Injuries"*

4:00 ROBERT E. WISE, M.D., Chrmn., Dept. of Diagnostic Radiology, Lahey Clinic Fdn., Boston, Mass., *"Color in Radiology"*

cussion held by members of the Knoxville Mental Health Center, Eastern State Hospital, Child and Family Services, and the University of Tennessee Psychological Clinic on the psychological and psychiatric facilities and services available to patients in the community.

Roane-Anderson County Medical Society

Dr. Ray Patterson, professor of medicine and chief of the allergy and immunology section of the medical school of Northwestern University, Chicago, Illinois, was guest speaker at the meeting of the Roane-Anderson County Medical Society on June 24. Dr. Patterson's subject was "Allergy—Black Magic?"

NATIONAL NEWS

The Month In Washington
(From Washington Office, AMA)

The American Medical Association has offered to cooperate in a Senate investigation of large medicare and medicaid payments to physicians and other health practitioners. The offer followed a Senate speech by Sen. John J. Williams, (R., Del.), in which he reported that the staff of the Senate Finance Committee had found that several thousand doctors, dentists and others had received $25,000 or more for their services under the two government programs in 1968.

In a second Senate speech, Sen. Williams expressed appreciation for the AMA offer to cooperate: "This is the type of cooperation we need, and I appreciate this support from the American Medical Association. I sincerely hope that we shall have similar pledges of support from representatives of the other groups affected. I can assure each of these groups that our study will not result in a blanket indictment against any segment of the industry involved. We fully recognize that the overwhelming percentage of those who are in any way connected or working with this program are trying to do a good job; however, when instances of exploitation or excessive charges are discovered they must be exposed and properly dealt with."

Sen. Williams, who has announced he will not seek reelection next year, is a member of the Senate Finance Committee which is making an extensive study of the operation of medicaid and medicare. He stated that although a staff report would not be ready until later this summer, the committee's investigation already had shown—

"First, in 1968 the medicare program paid $25,000 or more to each of at least 5,000 physicians. Second, thousands of health practitioners—doctors, dentists, optometrists, and others—were each paid $25,000 or more under the welfare health care programs in 1968. . . . A surprising note is the large number of dentists appearing on the lists from welfare agencies. . . .

"Data has also been gathered and detailed tables prepared comparing the average medicare payments for the most common surgical procedures for older people with the maximum payments allowed under the most widely held Blue Shield contract in the same geographical area.

"The results are startling. Medicare's average payments run as much as two to four times as high as Blue Shield maximums. For example, in two areas of the country medicare's average payment for a cataract operation is more than four times as much as the Blue Shield allowance. These are not isolated cases. There is a pronounced pattern of inflated payments by medicare.

"The report to the committee will include pinpointing the causes underlying these extremely generous handouts of public funds.

"Another unusual situation has occurred in Social Security's pressing carriers to pay for so-called supervisory services rendered by a teaching physician even though the actual care is provided by an intern or resident. Before medicare virtually no insurer paid for such services. . . .

"The investigation has expanded the evaluation of carrier and intermediary performance to determine whether the Government is getting what it is certainly paying for and the extent to which intermediaries and carriers are carrying out specific functions assigned to them by the medicare statute.

Thus far a wide variance and level of performance has been observed. . . . The Law requires intermediaries and carriers to exercise effective controls on utilization of services. . . . Yet some carriers and intermediaries appear virtually to ignore performance of this vital function while others seem to be doing a reasonably effective job."

Following Sen. Williams' first speech, the AMA issued a statement saying that it shared with the Senator a concern over the rising costs of medicare and medicaid. The Association offered to cooperate with the Senate Finance Committee or any other congressional committee studying the problem of rising health care costs. The AMA earlier had made the same offer to Health Education and Welfare Secretary Robert H. Finch. The AMA statement said:—

"For some time the AMA has been giving national leadership in coordinating the efforts of state and county medical societies in the establishment and effective functioning of local review and utilization committees checking on the health care services rendered under the medicare and medicaid programs. Close liaison also has been established between carriers and many medical societies in reviewing disbursements under the government programs.

"All investigations so far have indicated that an overwhelming majority of physicians participating in medicare and medicaid are charging reasonable fees. The charges of only about two percent of the physicians receiving payments from the programs have been challenged. Of course, the AMA favors appropriate action in any of the cases where physicians are found to receive improper payments. Last June, the AMA Board of Trustees urged all state and local medical societies 'to act swiftly and firmly in all instances of known exploitation, and excessive charges for health care that may occur in their jurisdiction.' In 1967, the AMA said 'any reports of abuses by physicians or by any other health care program should be thoroughly and promptly investigated and action taken where indicated.' Several medical societies have expelled members where it has been proved that a physician's charges were excessive or he in some other way exploited the program.

"The AMA, through its publications and speeches by its officials, has been emphasizing to physicians the responsibility they have to hold down the health care costs of their patients both under and outside government programs. In an April 17 letter to Finch, Dr. Wilbur said the AMA 'is eager to make available to your office the composite experience and judgment of the nation's physicians, who are the principal providers of health care to all the people.'

"The knowledge and judgment of the nation's physicians—as well as of the prepayment plans, health insurance industry, hospitals, the allied health professions, the actuaries and others—must be enlisted in your battle against the health-care portion of the inflation problem', Dr. Wilbur said."

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The House passed and sent to the Senate a three-year $937 million extension of the Hill-Burton Act under which the federal government has helped finance construction of hospitals and nursing homes with 425,000 beds.

Members approved the measure on a 351 to 0 roll call after turning down a series of amendments designed to channel the matching hospital grants more into big cities than urban areas and into modernization rather than new hospital construction.

In addition to extending existing aid, the bill provides new loan guarantees, as requested by the Nixon Administration, and interest subsidies, which the Administration opposed.

The bill as passed, authorizes appropriations (over three years) up to $405 million for hospital construction; $165 million for modernization; and $300 million in guaranteed loans, toward which the government would contribute up to $37 million in three percent interest subsidies. In addition, grants up to $30 million could be made for emergency room modernization.

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The American Medical Association urged that Congress approve full appropriations for medical education programs. Dr. C. H. William Ruhe, director of the AMA's Divi-

sion of Medical Education, testified before a House appropriations subcommittee that the nation's urgent need for more physicians could "only be met effectively by a major increase in the capacity of American medical schools to educate more physicians."

"It is therefore appropriate to emphasize again that full funding in the amounts authorized by the Health Manpower Act of 1968 is necessary to permit the construction of new and expanded facilities before major enrollment increases will be feasible," Dr. Ruhe said.

In a letter to the House Public Health and Welfare Subcommittee, the AMA also supported extension of the Medical Library Assistance Act. Dr. Ernest B. Howard, AMA executive vice-president, said that "we cannot exaggerate the importance to the health professions and the public they serve: of the many beneficial services supported through the programs."

MEDICAL NEWS IN TENNESSEE

Mid-South Medical Association

More than 1,000 physicians and students attended the Eighth Annual Meeting of the Mid-South Medical Association, May 21-23 in Memphis. Fifteen outstanding guest speakers of national and international reputation presented lectures on subjects of interest to both general practitioner and specialist. Four "Curbside Consultation Panels," composed of local experts were available for members of the Assembly to present and discuss interesting and troublesome problems. In addition to the annual business session, the meeting of the U.T. College of Medicine Alumni Association, and class reunions, there were varied social affairs including the Annual Banquet of the Association on May 22nd.

Dr. Jesse T. Davis, general surgeon of Corinth, Mississippi, assumed the presidency, succeeding Dr. W. K. Tilley of Lebanon, Tennessee. Dr. Glenn P. Schoettle, general surgeon of West Memphis, was chosen president-elect. Dr. Schoettle, a graduate of the University of Tennessee College of Medicine, has practiced surgery since 1954. He is a clinical instructor in surgery at U.T. and a fellow of the American College of Surgeons.

Other new officers are Dr. R. Frank Rhodes of Osceola, Arkansas, Dr. Rhea L. Wyatt of Holly Springs, Mississippi, Dr. B. G. Mitchell of Memphis and Dr. Robert K. Nichols of Prattsville, Alabama, all vice presidents.

University of Tennessee College of Medicine

Dr. Andrew D. Holt, President of the University of Tennessee presented degrees and certificates to 285 graduates at the Medical Units' spring commencement ceremonies, June 8th. Dr. L. W. Diggs, emeritus professor of medicine, delivered the commencement address. His subject was "The Individual and the Group."

Graduates included 94 students receiving the B.S. in Pharmacy (the largest graduating class in the college's history); 82 earning the M.D.; 45 the B.S. in Nursing; and 34 the D.D.S. Certificates were awarded to seven graduates in radiologic technology and one in dental hygiene.

Two students received the first D.Pharm. degrees awarded by the College of Pharmacy. Other graduate degrees included ten in the College of Basic Medical Sciences—six Ph.D.'s and four Master's degrees; two M.S. degrees in pediatrics in the College of Medicine; and eight master's degrees to be awarded by the College of Dentistry—five in orthodontics and three in pedodontics.

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Chancellor Homer F. Marsh of the Medical Units has announced the approval of a special improvements grant from the Department of HEW for the Colleges of Medicine and Dentistry that will approach three million dollars over the next five years. The grant for this year, awarded July 1st, was $327,000 for the College of Medicine and $168,000 for the College of Dentistry. Subsequent years (actual funding is on a year-to-year basis) is expected to be approximately $400,000 annually for the College of Medicine and $200,000 for the College of Dentistry.

Developed as a joint venture of the two colleges, it will aid U.T. Medical Units as a whole (including College of Pharmacy, College of Nursing and College of Basic Medical Sciences). The funds will go primarily to establish audio-visual facilities, including closed circuit television, other equipment to aid in teaching, and to add to the faculties in both clinical and "basic science" areas. A new staff member will be added whose primary job will be to revise and coordinate medical curriculum.

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Dr. Leonard Share, of Case Western Reserve University, will assume the duties of chairman of the Department of Physiology and Biophysics at the University of Tennessee Medical Units in August. He succeeds Dr. Nicholas R. DiLuzio, who resigned last year to join the Tulane faculty. Dr. Share, a professor of physiology at Case Western, has specialized in the cardiovascular and renal field. In 1962 he spent a year at the Institute of Biological Chemistry in Copenhagen. He holds the B.A. degree from Brooklyn College, the A.M. degree from Oberlin, and the Ph.D. from Yale. He is a member of the American Physiological Society, the Society of the Sigma Xi and the Endocrine Society.

St. Jude Children's Research Hospital

Dr. Donald Pinkel, medical director of St. Jude Children's Research Hospital, has announced the addition of two distinguished physicians to the Scientific Advisory Board of the Memphis research facility. Dr. Michael E. DeBakey of Houston, and Dr. William J. Harrington of Miami, have agreed to serve on the nine-member board, which includes respected scientists from across the nation. The board meets once each year at St. Jude to evaluate the scientific efforts at the hospital.

Dr. DeBakey is president and chief executive officer of Baylor University's College of Medicine in Houston and director of the Cardiovascular Research and Training Center of Methodist Hospital there. He is also professor and chairman of the department of surgery at the Baylor Medical College, a post he has held since 1948.

Dr. Harrington, internist with a special interest in hematology, is professor and chairman of the Department of Medicine at the University of Miami School of Medicine.

Meharry Medical College

Meharry Medical College has been awarded two grants totaling approximately $800,000 to upgrade its medicine and dentistry schools. The Public Health Service approved $400,000 for the school of dentistry and $399,916 for the school of medicine.

PERSONAL NEWS

Dr. Francis Murphey, Memphis, professor and chairman of neurosurgery, University of Tennessee College of Medicine, has been awarded the Distinguished Service Award of the American Board of Neurological Surgery, in recognition of his outstanding contributions to his profession. Dr. Murphey, a past chairman of the ABNS, presently is a member of its Advisory Council. He is a consultant to the National Institutes of Health as well as a member of several other professional organizations in neurosurgery.

Dr. Thomas G. Pennington, Nashville, has been named president of the Middle Tennessee Medical Association, succeeding Dr. K. J. Phelps of Lewisburg. **Dr. George Holcomb, Jr.,** was re-elected secretary-treasurer.

Dr. Lawrence L. Cohen is the first recipient of the Memphis Kiwanis Club Distinguished Service Award for "unselfish service to the community and club."

Dr. Terrell B. Tanner, formerly of Hartwell, Georgia, has opened his office for the practice of medicine in Gatlinburg. Dr. Tanner is a graduate of Emory University and of Emory Medical School, interned at the U. S. Navy Hospital in Pensacola, Florida, and is a graduate of the U. S. Navy School of Aerospace Medicine. He is a member of the American Academy of General Practice, and was a member of the Board of Directors of the Georgia Academy of General Practice.

Dr. Glenn E. Horton of Memphis was recently elected to the Board of Regents of the American College of Allergists at the 1969 annual meeting in Washington, D.C. Dr. Horton has just completed serving on one of the National Advisory Boards as this College's representative and as chairman of their Bronchopulmonary Committee. Locally, Dr. Horton is President of the Mid-South Allergy Forum.

Dr. Halden W. Hooper, Gallatin, has been re-elected to active membership in the American Academy of General Practice.

Dr. B. G. Mitchell, orthopedic surgeon, Memphis, has been named Chairman of City of Memphis Hospitals.

Dr. Herschel Graves, Jr., chairman of the Executive Committee of the Nashville-Davidson County Unit of the American Cancer Society, was guest speaker at a recent meeting of the Nashville Exchange Club.

Dr. Phineas J. Sparer, professor of psychiatry and preventive medicine at the University of Tennessee Medical Units, reached the retirement age of 70 on June 15, and donated his professional library of some 2,000 volumes to the University. A Committee honoring Dr. Sparer was formed some time ago and commissioned **Paul Penczner** to paint his portrait for the library of the department of psychiatry. The portrait was unveiled at a dinner honoring Dr. Sparer on June 14.

Dr. Robert G. Allen, Memphis, was named president of the Tennessee Heart Association at the Association's annual meeting held recently in Memphis. Dr. Allen succeeds **Dr. Fred B. Ballard, Jr.** of Chattanooga. **Dr. Blair D. Erb** of Jackson was named president-elect, and **Dr. Thomas F. Frist,** Nashville, was appointed vice-chairman of the program committee.

Dr. James J. Acker, Knoxville, assumed the presidency of the East Tennessee Heart Association on May 10th at the Association's 20th annual meeting and awards dinner in Gatlinburg. **Dr. Alfred D. Beasley,** Knoxville, was named president-elect and **Dr. Edward Buonocore,** first vice president. Elected to the Executive Committee were **Dr. John E. Kesterson,** outgoing president, and **Dr. Richard A. Obenour,** both of Knoxville.

ANNOUNCEMENTS

Calendar of Meetings, 1969

National

Aug. 10-15	American Congress of Rehabilitation Medicine, Palmer House, Chicago
Sept. 2-6	International Tuberculosis Conference, Waldorf Astoria Hotel, New York
Sept. 4-6	American Association of Obstetricians and Gynecologists (Annual Meeting), the Homestead, Hot Springs, Va.
Sept. 13-19	American Electroencephalographic Society, El Cortez Hotel, San Diego, California
Sept. 14-20	American Society of Clinical Pathologists, Palmer House, Chicago
Sept. 14-20	College of American Pathologists, Palmer House, Chicago
Sept. 14-20	International Congress of Electroencephalography and Clinical Neurophysiology, El Cortez Hotel, San Diego, Calif.
Sept. 16-20	Congress of Neurological Surgeons, Sheraton-Boston Hotel, Boston
Sept. 21-27	World Congresses of Neurological Sciences (9th International Congress of Neurology and 4th International Congress of Neurological Surgery), New York Hilton, New York
Sept. 26-Oct. 3	American Academy of General Practice, Philadelphia
Sept. 30-Oct. 3	American Roentgen Ray Society, Washington-Hilton, Washington, D. C.
Nov. 6-8	American Society of Cytology, Palmer House, Chicago
Nov. 10-13	Southern Medical Association, Atlanta, Ga.
Nov. 10-14	American College of Preventive Medicine, Philadelphia
Nov. 13-15	American Thyroid Association, Drake Hotel, Chicago
Nov. 13-15	Southern Thoracic Surgical Association, Mayflower Hotel, Washington, D.C.
Nov. 13-18	American Heart Association, Memorial Auditorium, Dallas
Nov. 19-22	Western Surgical Association, Statler Hilton Hotel, Dallas
Nov. 30-Dec. 3	American Medical Association (Clinical Convention) Denver

Clinical Center Study of Hemolytic Anemia

The cooperation of physicians is requested in the referral of patients for studies of idiopathic auto-immune hemolytic anemia being conducted by the National Institute of Allergy and Infectious Diseases at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

Referrals of patients with Coombs' positive idiopathic auto-immune hemolytic anemia are needed. Also, selected patients with secondary types of auto-immune hemolytic anemia, especially of the cold antibody type, will be accepted. Preference will be given to patients who have not received previous treatment.

Studies will be performed to determine the type of antibodies involved and the role of complement in hemolysis. Following this, patients in need of therapy will be treated, and experimental drugs may be used. All patients will be carefully followed during the course of the study. On completion of their studies, patients will be returned to the care of the referring physician who will receive a summary of findings.

Physicians interested in having their patients considered for admission to these studies may write or telephone: Michael M. Frank, M.D. or John S. Sergent, M.D., Clinical Center, Room 11-N-104, National Institutes of Health, Bethesda, Maryland, 20014. Telephone: (Area Code 301) 496-4964.

Research Support Applications Invited by Heart Association

Research investigators may now apply to the American Heart Association for support of studies to be conducted during the fiscal year beginning July 1, 1970. September 15, 1969, is the deadline for submitting applications for Established Investigatorships, British-American Research Fellowships and foreign Visiting Scientist Awards. Applications for Grants-in-Aid are due no later than November 1, 1969. Awards in 1970-71 will be made as follows:

Established Investigatorships—Five-year awards to scientists of proven ability who have developed their careers to the point where they are able to conduct independent research. Stipends begin at $13,000 with fringe benefits and $1,000 yearly increments. An additional $1,000 is given annually as a departmental grant to the investigator's department head.

British-American Research Fellowships—One-year training awards to U.S. citizens, usually with two years of postdoctoral research experience at time of application, to work in a qualified institution in Great Britain. Stipend $7,500 plus dependency and travel allowances. Departmental grant, $750.

Visiting Scientists—Awarded for three to 12 month periods, enabling American investigators to invite experienced foreign scientists to the U.S. for research collaboration. Stipend negotiable per comparable positions at host institutions, and travel allowance. Application must be initiated by U. S. host scientist. Although the primary deadline is September 15, additional applications will be received until December 31, 1969, subject to the availability of funds.

The Association also appoints a limited number of investigators of unusual capability and widely recognized accomplishment as Career Investigators, assuring them of financial support throughout their careers. Career Investigatorship awards are made by the AHA Board of Directors on recommendation of the national Research Committee, and *not by application.*

Application forms for investigatorships, fellowships, and grants may be obtained from the Research Department, American Heart Association, 44 East 23rd Street, New York, New York, 10010.

Programs Scheduled By College of Medicine, University of Kentucky

August 24, 1969—Symposium: "Mycotic Infections for the Clinician," Imperial House, Lexington, Kentucky—Joint Sponsor, Kentucky Chapter AAGP, No Fee.

November 13-14—"Recent Developments in the Surgical Care of Trauma," Albert B. Chandler Medical Center, University of Kentucky, Fee Undetermined.

December 19-20—"Practical Ophthalmology for the Generalist," Albert B. Chandler Medical Center, University of Kentucky—Fee: $40.

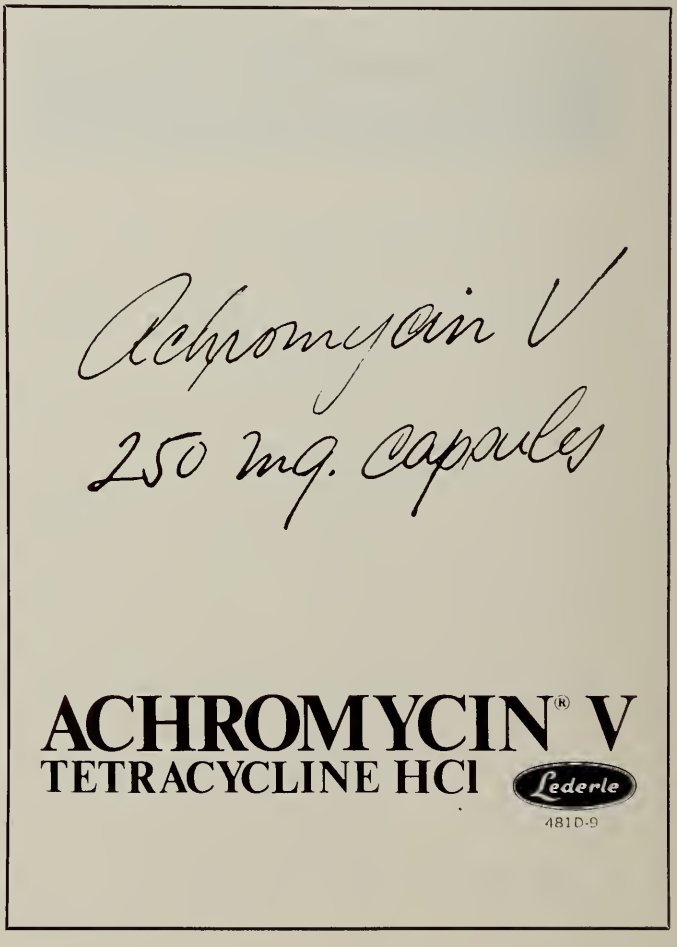
For additional information write to: Frank R. Lemon, M.D., Associate Dean, Office of Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky, 40506.

AAP Annual Meeting

In depth presentations on child care—a national challenge, new considerations in the diagnosis and management of neonatal jaundice, key issues in infant mortality, mutiphasic screening for pediatric patients, and current developments in objective means of diagnosis and therapy in allergic disorders, will be discussed during the 38th annual meeting of the American Academy of Pediatrics in Chicago, October 18-23.

More than 4,500 persons including pediatricians, their families and guests are expected to attend the meeting in the Palmer House Hotel. Additional timely scientific subjects will be presented during meetings of the Sections on Allergy, Anesthesiology, Cardiology, Child Development, Diseases of the Chest, Military Pediatrics, Pediatric Pharmacology, Public Health Pediatrics, and Surgery.

The meeting will also feature numerous seminars; round tables; motion picture films; a special one-day conference for pediatricians and pediatric nurses; and hospital conferences at the Loyola University School of Medicine, the Michael Reese Hospital, and the University of Illinois School of Medicine.



T M A

THE VIEWING BOX

Do You Ever Ask Yourself: What Has AMA Done for Me?

The article which follows was written by David B. Weihaupt, member of the Division of Public Affairs of the American Medical Association.

It should be required reading. Hundreds of times I have been asked, "What does the A.M.A. do for me?"

Generally the physician who asked this question does not really wish to know—he just wants to voice his objection to some particular decision or against some established policy of the A.M.A. As you may recall, the House of Delegates creates the policy of the A.M.A., which is implemented by the Board of Trustees and the Executive Staff. Policy is decided by hundreds of *hard working, dedicated and knowledgeable physicians* whose views may or may not agree with yours or those of your *delegates.*

The American Medical Association is undergoing a study of its own organization and administrative management by an internationally known firm of management consultants.

These are critical times for medicine, for YOU and for ME. By carefully studying this most excellent release you will be supporting American medicine.

Your Delegates will welcome your criticisms and suggestions.

M. Vaun Adams, M.D.

Dr. Weihaupt's article follows in full:

David B. Weihaupt

As you know, and as I well know, the questions are asked many thousands of times per year by physicians—What is the AMA doing? What have they ever done for me? What's going on at 535 North Dearborn? What am I getting for my dues?

I think these questions are rightly asked, for a membership card in the AMA does not automatically endow its holder with a sophisticated knowledge about the functions and purpose of the AMA. I do believe that the answers to these questions are available, throughout the course of the year, but they're supplied in a piece-meal basis of letters, pamphlets, and literature that come through the mail, most of which, physicians do not have the time to read as you well know. I am offering the correct information, facts and figures about the American Medical Association and what it is doing for you, the public, and for the nation as a whole—the truth, if you will. I hope you accept what I say, as well as many people apparently accept the fallacies printed about us in local newspapers and national magazines. I am confident I can prove to you that the AMA is a tremendously functional and productive Association doing an enormous job in serving the profession and the people of this country.

In the following information, I would like to ask you to read into the facts and figures, the benefits that you have and will derive from what we're doing. The general purpose of the Association, is of course, to promote the science and art of medicine and the betterment of public health. I think the following will prove that this is the truth.

I will not defend, apologize, or excuse AMA, its policies or philosophy, which may be different from yours, or the lost battles of the past.

Now let me give you the following information and facts, not in the expectation that you will remember them, but in hopes that you will comprehend the whole picture and carry it in your philosophy to your community, your friends, and physicians of your county medical society. These figures come from the AMA and not through your local newspapers.

A. There are approximately 317,000 physicians in this country, of which 215,000 are AMA members.

B. Of these, only 164,000 are dues-paying members and not all are full dues-paying members.

C. Approximately 28% of our total budget is from physicians' dues. The remainder we have to plan, program, and work for

through our advertising and exhibit revenues.

D. Your dues of $70 would have to be over $220 to make up the needed funds to operate if it weren't for the abilities and the hard work of the people at AMA in obtaining these revenues.

E. Approximately $5 million of the budget goes for salaries for the 922 employees. In this group are physicians, attorneys, chemists, journalists, biostatisticians, and accountants who are high calibre people.

F. We have real estate taxes of approximately $275,000 and social security payments of approximately $350,000.

The AMA is one of the world's largest publishers, and about $12 million of our budget goes into paper, printing and mailing. I ask you to consider all the following figures on a basis of a cost of 11¢ per page to produce and mail. These costs, by the way, are up approximately 181% in the last seven years. I would like you to consider the following as benefits not only to the general public, and AMA members, but also as benefits derived from non-members, for AMA serves the profession, as a whole.

1. Since 1960, over 3 million pieces of literature have been sent to students of medical schools.

2. The AMA NEWS has a circulation of approximately 340,000 and is published each week. That's about 17 million newspapers per year. Each physician, member or not, members of Congress and major newspapers all over the country receive copies.

3. We have approximately 3,500 different pamphlets—child care, health education, health tips, sex education and many others. We send out over 100,000 copies per year of each of the major pamphlets and thousands of the others.

4. We have sent out over 2 million copies of the AMA First-Aid Manual in the past several years.

5. We publish 10 specialty journals with a circulation of 226,000 and we recently released 311,000 pieces of mail to physicians in this country on health education materials.

6. Every two years, we publish the AMA Directory, 6,500 copies, which contains biographical and educational data on every licensed physician in the United States. It is a three-volume set and they are sent to every state and county medical society, all journal editors, and the libraries of 94 medical schools.

7. The magazine "Today's Health" comes out monthly with a circulation of 700,000 each month, a mailing of about 8½ million magazines each year.

8. "Horizons Unlimited" on health careers has been sent in quantities of tens of thousands to schools, colleges, and medical societies, free.

9. In one month, we sent out 30,000 copies of our booklet "Selective Service, Military Service, and the MD," to medical schools and other organizations requesting it.

In addition, you may be familiar with our books "Current Medical Terminology" and "New Drugs," which are sent out by the thousands each year.

10. JAMA, the Journal of the American Medical Association, has a circulation of 219,000, and it comes free to all members of the AMA. This, "Today's Health," AMA News, and the specialty journals cost the AMA about $50 per year to send to each physician member. The AMA specialty journals and JAMA are published by the McCall Corporation in Dayton, Ohio. With all these publications and materials distributed, the members of the AMA carry some of the burden of the non-members.

11. Each year, thousands of manuscripts are submitted to us for review, and actually, we are able to publish over 1,000 each year.

12. We check over 500 medical publications each month for useful information to relay to you through our publications.

13. In 1967, over 25,000 copies of "Winning Ways With Patients" were sent free.

This is actually a small percentage of the tremendous publishing, printing and mailing burden that we have every year, and this is done for the benefit of the public, the medical profession, component societies, and other organizations in the country. The natural question is—Why all this paper?

The reason is that these publications have been asked for by the 242 members of the AMA House of Delegates, by the public of this country, the schools of the nation, allied health professions and health institutions, and also the more than 1,900 state and county medical societies. We publish these materials as answers to the needs of these organizations. As a result of the asking by these organizations, we research, plan, design, publish, print, and mail these tens of millions of pieces every year. Literally thousands of pieces of different types of material are relayed to your component medical societies. Information on legislation, state laws, federal laws, plans and programs of the AMA, and just normal everyday correspondence between component organizations. I realize this is a lot of time, work

and a lot of paper, but this is the responsibility of the AMA to the people of this country, and it is a responsibility that we must keep, or would you have us yield and give this job to someone else—shall we say, industry, state government, the federal government, or labor. Who else but the AMA is more qualified, more dedicated, more capable and more unbiased to do this job for the physicians and the people of this country—and the job must be done.

I gave you small packaging of the total statistics available and what actually goes out of the AMA. Now for some of the things that come into the AMA.

1. In one day, there are 1,000 long distance and many more local calls coming into our office.

2. Over 21,000 pieces of first class mail are handled by the AMA every day. This is about 6 million pieces of mail every year. Consider the fact that to serve membership and the public, it takes people to receive, open, distribute, reply to and file this enormous load of correspondence.

3. Each year, we receive 30,000 requests from the general public for help and information, and we get many thousands more requests for information and help from physicians, the profession —not just members.

4. In our card catalog of physicians, there are 6,000 changes every week in physicians' home and office addresses.

5. The Archive Library of the AMA handles in an average month:

A. 2,400 research requests
B. 750 requests for books
C. Loans of 400 library items
D. Photocopying and mailing of approximately 19,000 pages of material
E. 40,000 books in the Library itself
F. 2,500 periodicals
G. 610 magnetic tapes with medical information
H. In the film library, there are 500 films, available to the public, medical societies and the individual physician to be used in learning or speaking. A cross file in the film library has over 7,000 cards. Although you may never use these benefits, tens of thousands of people do each year, and will in the future. They are available for you.

6. The film "Medical Careers" has been shown 90,000 times and the film "Careers Unlimited" has been shown over ¼ million times. A new film called "Faith" is being made and publicity spots have been sent out to over 2,000 radio stations. Recently, we sent out health tips to over 600 TV stations and 2,600 radio stations—a 60 second spot, for the public benefit.

7. In the past year, we have arranged for over 1,300 health films to be shown 32,000 times at 7,000 appearances before 13 million people.

Conceivably these are very boring figures, but if you consider them carefully, you will see the enormous job that the Association is doing in almost all fields of medicine. It would be a wonderful thing if the general public and physicians had an awareness of this enormous job. Then, the many misconceptions about the AMA would most certainly be cleared up.

8. We have designed and built 110 medical exhibits for use by the public, medical societies, and medical schools. Some of them were at the Kentucky Medical Association Annual Meetings last year and this year.

9. I am sure many of you are familiar with the page, the "Legislative Roundup" which goes to all state, county medical societies, and physician leadership in the states. It is a one-page piece with a brief summation of the status of current legislation in Washington.

10. It is hoped that in the near future, we can initiate a new program called "Report of the Nation," which will be a coast-to-coast one-hour network TV program put on 3 or 4 times a year by the AMA to provide accurate and truthful information to the public. We doubt that we will be able to afford equal time with the President of the United States.

Now I have covered what goes out of AMA, also what comes in. Here is more information on what goes on in the AMA. Considering the preceding, it's possible these questions have already been answered. But let me continue.

1. There are over 1,000 meetings held every year and over 800 physicians serve without pay on the 80 commissions, councils, and committees. That's one physician for every 200 in the country. There are 80 committees, 16 councils, 4 commissions, 22 scientific sections, 10 specialty journals, 50 departments and 8 divisions, which are the Communications Division, Law Division, Management Services Division, Scientific Activities, Scientific Publications, Health Service, Medical Education, and my Division, Field Service. Under these are the Council on Drugs, Committee on Quackery, Committee on Cutaneous Health and Cosmetics, Committee for Research on Tobacco and Health, and on and on to a total of 80. All of this was created by the actions of the House of Delegates, for the needs of medical societies, the general public and the profession.

2. Throughout the course of the year, we sponsor 400 scientific lectures, 400 scientific exhibits at the Annual and Clinical Sessions and 300 exhibits on New Drugs. There were 39,000 registrants at the 1967 Annual Meeting in Atlantic City and these people had an opportunity to see the latest developments in American Medicine.

3. I am sure you have heard of the AMA-ERF Student Loan Program, sponsored by the AMA. Under this program, the AMA has arranged over



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Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.
Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.
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45 million dollars in loans, involving 28,000 separate loans to 19,000 medical students, interns and residents. In Kentucky alone, we've arranged over 852 loans encompassing over $963,000.00 to your medical students. The average physician contribution in this country is $2.50. Since 1955, we have received and distributed over $35 million to medical schools in this country. We have Councils and Committees who are also working very hard to increase the enrollment in medical schools, expansion of the facilities of those that exist, plus assisting in the forming of new medical schools. Sixteen are now in the making, and AMA has made major contributions to their beginnings.

4. Woman's Auxiliary, with headquarters at AMA, has received and distributed over $3 million for medical schools and $4 million to the Student Loan Program.

5. We have also available some direct benefits, such as the AMA Retirement Program and the Disability Program that physician members can take advantage of.

6. Our Speakers' Services Department writes and supplies speeches and other materials for research for physicians throughout the country and officers of the Association. We also supply building plans, partnership agreements, and a variety of other services are at the disposal of physicians.

7. Our Communications Division has literature, program aids, films, speeches, press materials, and other services available to state and county medical societies, as well as physicians. For the Director of the Communications Division, there is an advisory committee which consists of state executive secretaries. Mr. Joe Sanford was a member, who lent a respected voice to this Committee and their programs for many years till his recent untimely death.

8. The Department of Medicine and Religion consists of a four-man staff working with medical schools, theological seminaries, hospitals, physicians and clergy in a very successful attempt to bring together the healing of the body and soul.

9. As I mentioned earlier, there are over 1,000 meetings held by AMA each year. Just to give you an idea of what these meetings are week to week, beginning June 10 through June 17, the following were scheduled:

A. Regional Workshop for State Chairmen of Medicine and Religion
B. Committee on Planning and Development
C. Conference Committee on Graduate Training and Surgery
D. Symposium on Exercise and Heart
E. Residency Review Committee on Neurological Surgery
F. Committee on Environmental Health
G. Committee on Aerospace Medicine

This schedule of meetings goes on 52 weeks a year including weekends, once again to serve the purpose of advancement of the science and art of medicine and the betterment of public health. These and all others cannot be eliminated for we would sacrifice not only the well being of the profession and public health, but the leadership of the physicians in medicine.

10. Undoubtedly, you have heard of the American Medical Association Institute for Biomedical Research. This was created by the AMA House of Delegates. There are 30 scientists doing research in immunology, medical ecology, virology, molecular biophysics, regulatory biology and neurobiology. This, too, is a service to all mankind.

11. Project Viet Nam is a program initiated by the federal government, which was not functioning too well, naturally, and the government asked the AMA to take it over, naturally. It is a program whereby physicians volunteer to go to Viet Nam and serve the civilian public of that nation. In two years since we have been handling the program, approximately 293 physicians have served in Viet Nam. Last month alone, we had 75 inquiries and 28 applications were filed. This month there were 9 physicians going to Viet Nam to serve under this program.

One of the most active divisions of the AMA is the Law Division which supplies to all departments and the Board of Trustees and the physicians throughout the country, legal opinions, guidance, information on medical liability, taxation, insurance, advertising, copyrights, and specific information on libel and slander. Thousands of physicians write every year and receive guidance on state problems, retirement problems, partnership agreements, and federal and state laws. Under the Law Division, the Department of Investigation wages a relentless battle against quacks and charlatans throughout the country, as a service to the public health and the profession.

12. Let me briefly give you the box score of the AMA Political Action Committee, which was involved in 131 Congressional races in 1966. Of those, 104 races were successful. They were involved in 15 Senate races, and won 13 of them, and some of these major victories were made in the state of Ohio as a result of the tremendous and effective effort of your Ohio Medical Political Action Committee.

And now, after all this information about the AMA and its services to the physicians and the public of this nation, I would like to discuss that which the press dearly likes to write about as a major and almost total function of the AMA—The Washington Lobby.

Some say all they do is try to enhance the income of physicians of this country. They write about this group, the Lobby, as a huge multi-million dollar organization—those,

who it is written, hate children, old people, the unborn, handicapped, and the poor. This is a huge, unjust burden which we carry. When this Lobby tries and succeeds in excluding the disabled persons from the new social security amendments, the press of this country generally says that the physicians hate the handicapped. In truth, these unfortunate people are not only treated free or at a decreased charge by physicians, but they're also covered under Title XIX of Medicare, and several other federal and state programs. This is a prime example of federal duplication. Only a fraction of one percent of the budget of the AMA goes to lobbying. Let me tell you more about this so-called multi-million dollar lobbying staff. In truth, it consists of four full-time registered lobbyists. Yes, we have only four men in Washington compared to Labor's 125 registered lobbyists and 300 unregistered lobbyists. Each of our four men has 12 senators and approximately 110 congressmen to learn about, work with and convince. A small force indeed. But don't let me minimize their abilities, their influence, their effectiveness and their successes. They do an outstanding job and this can be proven by our past and present successes in Washington. It can also be proven by some of the adverse publicity that we get. There were some rather uncomplimentary quotations in one of the nation's leading magazines not too long ago. Senator Stephen Young (Ohio) referred to this huge AMA lobby in the November, '67 issue of *Playboy Magazine,* as follows: "One of the slickest, best financed in the nation" and "it has been the spendingest lobby in Washington in recent years." Not only is his choice of words uncomplimentary, but inaccurate.

So you can see, we have immunity nowhere and it is popular to discuss this huge four-man lobby in *Playboy,* adding sophistication to the magazine, and supposedly some degree of credence by quoting Senator Young, though his statements were gross inaccuracies.

Let me give you some information on what this lobbying staff is really up against and what it really does. In the 89th Congress, there were 26,500 bills introduced of which 1,600 had health implications. The AMA offered information and opinions on 33 of these bills, and contrary to popular belief, we favored 21, partially favored 5, and opposed only 7. In the first session of the 89th Congress, there were 850 bills with medical implications, but in the first session of the 90th Congress, there were over 1,126 bills pertaining to health. We have one man in Washington to analyze these bills. Back in Chicago, there are three men to correlate policy and position and testimony on these bills, and to establish a position as to the impacts of the legislation on physicians of this country and the general public. I wish to point out that a great deal of the work done in Washington by our staff is for the benefit of the science of medicine and that these men supply basic medical information to members of Congress, for themselves and for the people of their district. They also help the legislators obtain family physicians when they move to the District of Columbia.

Now, a little about my Division—Division of Public Affairs—The Washington office is part of this Division, and we headquarter in Chicago. There are 12 men covering the United States, also Puerto Rico (The Virgin Islands) and as far away as Alaska and Hawaii. We work in person-to-person contact with staff and leadership of state and county medical societies. I personally cover Ohio, Kentucky and Indiana. A great percentage of my function is in the legislative and lobbying area. In our work, we interpret and promote the activities and services of all AMA Departments to component societies, and, in turn, familiarize AMA with the programs, problems, needs and opinions of component medical societies, and the public, physicians and physician leadership.

But when I am asked, "What do I get for my dues?", if I don't have the time to give a speech, my short reply is "Nothing." Who said that the $70 in dues would come back to the member January 1 each year as a short term capital gain? The AMA is not an investment house. The joining of the AMA, state medical association and county medical society is another service that the physician performs not only to his profession, or for the betterment of public health,

but for himself. Many physicians do more in their contributions to these organizations, by serving on committees and councils and as officers.

But, let me say this: If all of the preceding information does not convince you of the effectiveness and dedication of AMA to the profession and the people of this country, let me ask you several favors.

1. Read with a critical eye, the newspapers and magazines of this country that mis-shape these statistics and misinterpret our work.

2. Don't quote your enemies, quote your friends.

3. Don't lend your voice to those who oppose medicine, thus adding credence to what they say. AMA and KMA aren't the ones passing the bills and controlling your practice.

4. Don't criticize AMA, county and state societies with inaccurate information, for this assists the enemies of medicine in eliminating the private practice of medicine and organized medicine as we know it today.

The opposition knows we are divided. They are not.

—*J. Med. Assoc. Alabama,* April, 1969

* * *

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Orthopedists
Otolaryngologists—Plastic Surgery
Plastic Surgeons

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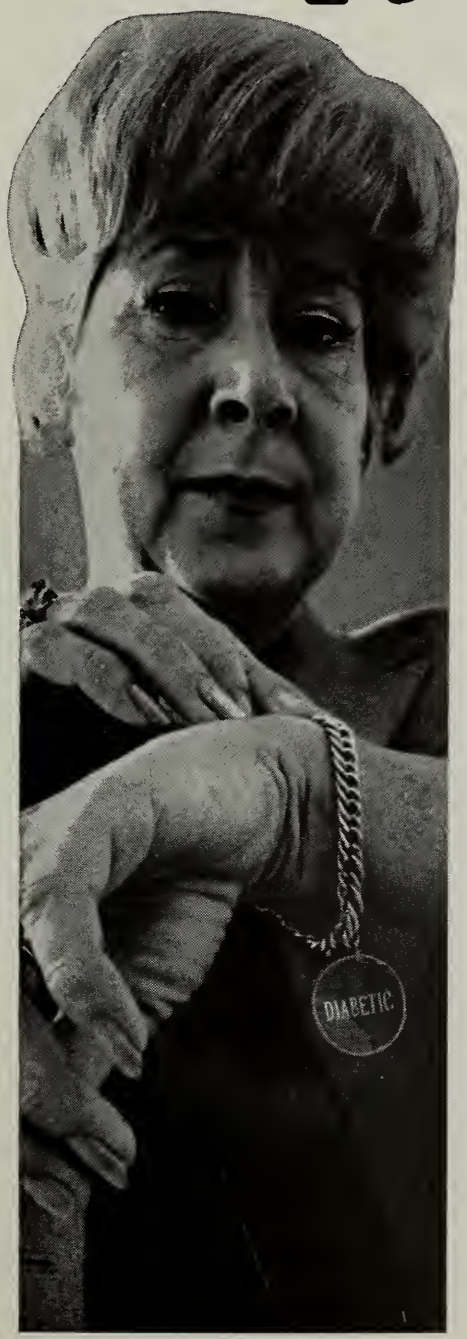
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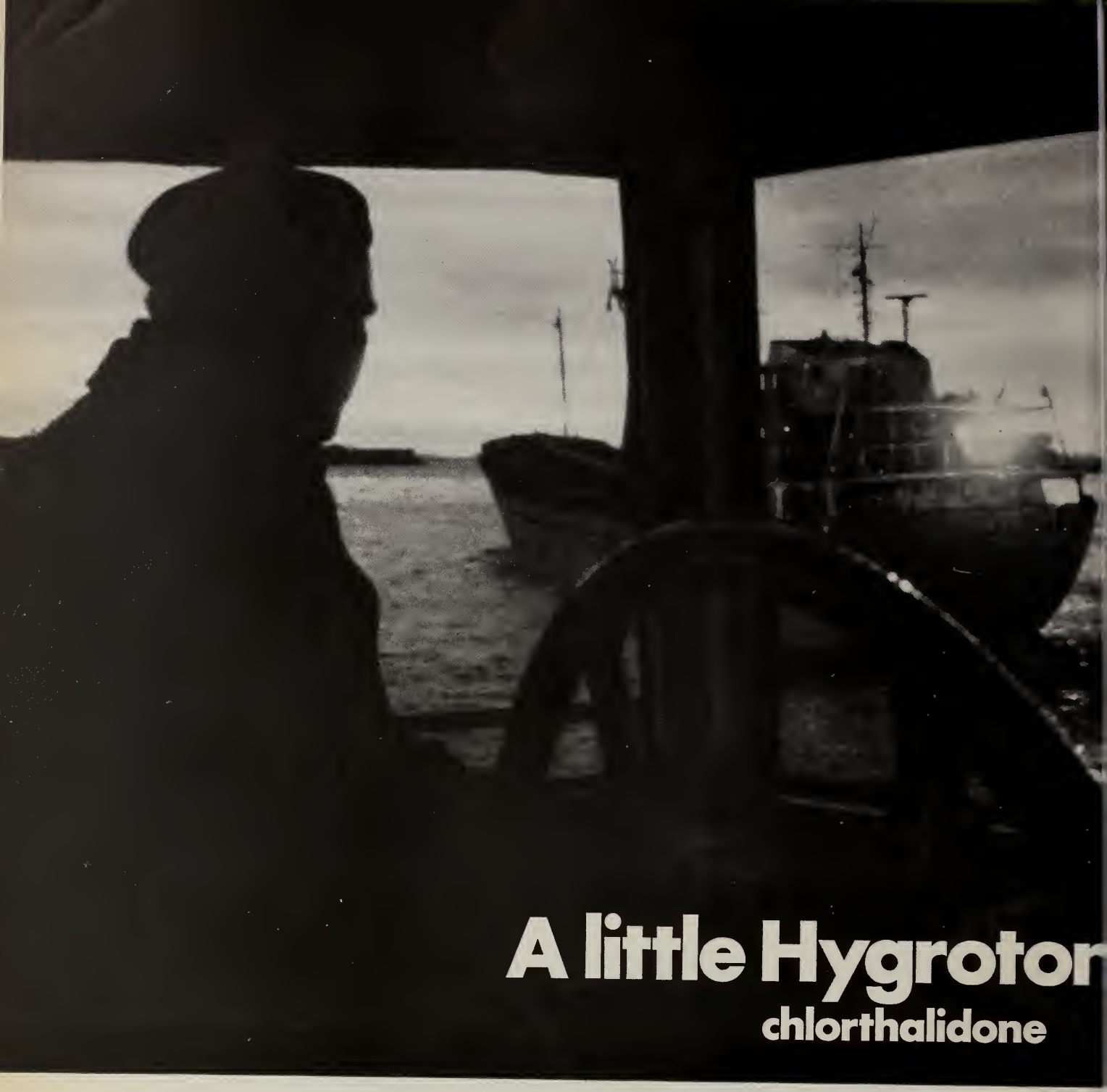
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Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

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SYMPOSIUM: Malignant Tumors of the Alimentary Tract*

Cancer as the second cause of death is well publicized to both the profession and the public. What is needed is a reorientation in attitudes of both populations—a turning from a sense of hopelessness to one of greater optimism. Some of what follows points to the curability of cancer. This is not new but needs re-emphasis to aid in education away from this sense of hopelessness. How strange the attitudes toward myocardial infarction and cancer—for the one cheerful support for an ultimately fatal disease, for the other too often an avoidance of responsibility in gloom even though the cure rate is high in some forms of malignancy.

Moderator: H. WILLIAM SCOTT, JR., M.D.
Nashville, Tennessee

Carcinoma of the Oral Cavity*

LOUIS ROSENFELD, M.D., and
JAMES GREEN, M.D.,† Nashville, Tenn.

Carcinoma of the oral cavity and pharynx encompasses a broad spectrum of anatomic sites, numerous cell types, a variety of proper therapeutic attacks and assorted prognoses for long term survival of the patient. Obviously, we cannot discuss in these few minutes many of the diverse types of oral neoplasms and I have therefore chosen to briefly mention an old favorite of mine, "snuff dipper's cancer," and then discuss at more length our experience with carcinoma of the tongue.

A few years ago when I presented a paper on *Snuff Dipper's Cancer* before a group of surgeons whose primary interest was cancer of the head and neck, most in the audience had never heard of this entity. This is not so with those practicing in the south and southwest. A surgeon from Dallas at that meeting stated that such lesions were so common in his area he did not believe it worth reporting. We in Tennessee are located in an area in which snuff dipping is endemic and this state has the dubious honor of possessing three large snuff factories. Squamous cell carcinoma of the oral cavity has been variously reported as being a disease of males in a ratio of 2:1, up to as high as 10:1. This is not true in our experience, especially when one considers the gingivobuccal sulcus, the site into which our snuff dipping ladies place their quid. The sex ratio is reversed in patients with carcinoma in this site and the statistical data on the following slides gives strong credence to the belief that prolonged use of snuff, in some people, is conducive to the development of squamous cell carcinoma at or near the site of application.

Figure 1 shows the sex distribution, and



SQUAMOUS CELL CARCINOMA OF BUCCAL MUCOSA, GINGIVA, FLOOR OF MOUTH AND ANTERIOR TWO THIRDS OF TONGUE

FIG. 1. Sex Distribution: Gingivobuccal squamous cell carcinoma as compared with patients with squamous cell carcinoma of the tongue and floor of the mouth.

compares the incidence of gingivobuccal squamous cell carcinoma with that in patients with squamous cell carcinoma of the

*Presented at the meeting of the Tennessee Chapter—American College of Surgeons, April 10, 1969, Gatlinburg, Tenn.

†From the Department of Surgery, Vanderbilt University School of Medicine, Nashville, Tenn.

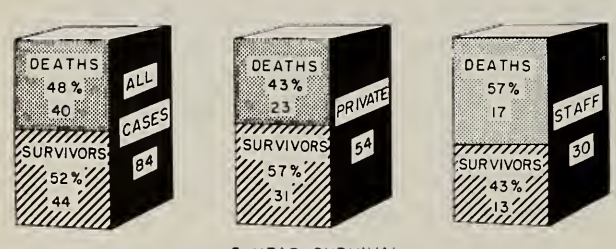
tongue and floor of the mouth. The location of squamous cell carcinoma in 214 women who gave an adequate history regarding the use of snuff is shown in figure 2. The 5-



FEMALES WHO GAVE AN ADEQUATE HISTORY REGARDING THE USE OF SNUFF. 214 OF 246 CASES.

FIG. 2. Location of squamous cell carcinomas in 214 women who gave an adequate history regarding the use of snuff.

year survival of 84 snuff using women with buccal and gingival squamous cell carcinoma is seen in figure 3. Private patients are contrasted with staff patients. These squamous cell carcinomas are usually of low virulence and should be cured by wide local excision. However, they are frequently multicentric and close follow-up to discover either a local recurrence or a new lesion is mandatory. We have not found irradiation very helpful in the treatment of these lesions.



5 YEAR SURVIVAL
DETERMINATE CASES OF SNUFF USING
FEMALES WITH BUCCAL AND GINGIVAL CARCINOMA

FIG. 3. Five year survival of 84 determinate cases of snuff using females with buccal and gingival squamous cell carcinoma. Private patients contrasted with staff patients.

Carcinomas of the tongue, especially those involving the anterior two-thirds, should be curable. The tongue is easily seen and examined. It is a sensitive organ and abnormalities can be recognized early by the patient. The lesions are usually on the surface and a definitive diagnosis is readily made by biopsy in the doctor's office. The paths of lymphatic drainage are downward into cervical lymph nodes which can be ablated. Perhaps nowhere else in the body does one have the opportunity to resect a carcinoma in continuity with the first, second and at times the third chain of lymph node barriers. Yet cure rates leave much to be desired. In 1967, Drs. Gobbel and Sawyers and Adkins (the first two of whom are members of the panel today), published the combined experience with carcinoma of the tongue from 1946 to 1964, both at Thayer Veterans Hospital in Nashville and the Nashville General Hospital. The three of us have discussed the treatment of these patients on many occasions and we agree that it might be of some value to compare the statistics they gathered at these hospitals with the statistics of my private patients who had carcinoma of the tongue. Follow-up data are 100% in my cases and practically the same in their group. There were 9 patients who died of postoperative complications in the clinic series and no postoperative deaths have occurred among the private patients. The survival data in both series are based on determinate and not absolute figures. The following six tables give comparative data on many aspects of the problem.

Table 1 indicates: (a) total cases, (b) age distribution, and (c) cell type. The 3 adenocarcinomas of aberrant salivary gland tissue, are favorable lesions and all 3 patients have lived well over 5 years, whereas, the rhabdomysarcoma was rapidly fatal.

Table 2 shows: (a) Anatomic site of the primary lesion. The private patient series

Table 1

TOTAL CASES, THE AGE DISTRIBUTION AND CELL TYPE

Veterans Hospital and Nashville General Hospital		Personal Series
1946-1964		*1946-1966*
110	Total Cases	74
	Age Distribution	
78%	Peak 40-70 Yrs.	73%
109 Squamous Cell	Cell Type	71 Squamous Cell
1 Rhabdomyosarcoma		3 Adenocarcinoma

was more favorable as there were 12% more lesions of the anterior tongue. (b) Clinical Estimate of Size. The private patient series had a more favorable outlook with 6% more of the smaller lesions.

Table 3 gives data on the cervical lymph nodes. Again we see that the private group is more favorable in that 12% less patients had cervical lymph nodes which contained metastatic cancer. The data reveal how inaccurate is one's clinical preoperative evaluation as to the presence or absence of metastatic disease in the neck. The high and similar percent of patients who had prophylactic neck dissections and were found to have cancer present in nonpalpable nodes is

Table 2

Anatomic Site of the Primary Lesion, Clinical Estimate of the Size of the Lesion, and Duration of Symptoms before Definitive Treatment

Veterans Hospital and Nashville General Hospital		Personal Series
	Anatomic Site of Primary	
59%	Anterior two-thirds of tongue	71%
41%	Posterior one-third of tongue	29%
	Clinical Estimate of Size	
24%	Less than 2 cm.	30%
76%	2 cm. and greater	70%
7 months	Average duration of symptoms before treatment	4 months (13 cases over 1 year)

Table 3

Significance of Cervical Nodal Metastases

Veterans Hospital and Nashville General Hospital		Personal Series
Negative— 47%	Incidence of palpable cervical mass on admission	Negative— 59%
Positive 53% (Bilateral—12 pts.)		Positive— 41% (Bilateral—9 pts.)
70%	Neck nodes clinically positive—path positive	55%
34%	Neck nodes clinically negative—path positive	36%
Unknown	*5 year survival, N.E.D., determinate cases,* if neck nodes contained cancer	43%
	Neck nodes negative for cancer (48 of 74 patients had neck dissections)	80%

Table 4

Five Year Survival in Relation to the Size of the Primary Lesion and its Location

Veterans Hospital and Nashville General Hospital				Personal Series		
# Cases	5 Yr. Survival	%	*Size of Primary Tumor*	# Cases	5 Yr. Survival	%
25	12	48	Less than 2 cm. in size	20	19	95
76	14	18	More than 2 cm. in size	41	24	58.5
			Location of Primary Tumor			
61	18	30	Anterior two-thirds of tongue	39	31	79
42	8	19	Posterior one-third of tongue	22	12	54

Table 5

Five Year Survival in Relation to Initial Treatment

Veterans Hospital and General Hospital				Personal Series		
# Cases	5 Yr. Survival	%		# Cases	5 Yr. Survival	%
5	3	60	Partial glossectomy	9	9	100
42	13	31	Partial glossectomy, radical neck dissection	37	26	70
23	6	26	Irradiation and radical neck dissection	1	0	0
31	4	13	Irradiation	8 (Interstitial—7) (External 1)	6	75
None			Pre-operative irradiation, partial glossectomy and radical neck dissection	6	2	33
1	0	0	No treatment	None		
102	26	25	Total experience	61	43	70

of great importance. The 5 year survival is determined to a great degree by the presence or absence of cervical node metastases.

Table 4 shows: (a) survival in relation to size, and (b) survival in relation to location. The survival in relation to initial treatment is shown in table 5.

Table 6 points up the factors conducive to a favorable result. We believe that these data in regard to cancer of the tongue as well as the comparative data of private versus clinic "snuff dipper cancer" patients, demonstrates that the private patient, when properly handled, fares better than the clinic patient.

Table 6

Factors Conducive to a Favorable Result

1. Cancer less than 2 cm. in size
2. Located in anterior two-thirds of the tongue
3. Cervical lymph nodes not enlarged and contain no metastatic cancer
4. Short interval between onset of symptoms and definitive treatment
5. A cooperative patient who returns for follow up visits
6. Cessation of use of alcohol and tobacco
7. Adequate and prompt initial treatment

Carcinoma of the Stomach*

J. LYNWOOD HERRINGTON, JR.,† M.D., Nashville, Tenn.

The incidence of gastric carcinoma has markedly declined in the United States during the past three decades. International comparisons of cancer mortality and age adjusted mortality rates for this disease attest to this fact. The incidence of gastric cancer however remains high in Japan, Finland, Iceland, and Chile. The high rate among inhabitants of the five Japanese islands is supported by the increased rate among Japanese residing on the west coast of the United States and in the islands of Hawaii. The former high death rate from gastric cancer in the Netherlands has been falling at a rate approximately equal to that in the United States. On the other hand, the mortality rate in England has remained stationary.

*Presented at the meeting of the Tennessee Chapter—American College of Surgeons, April 10, 1969, Gatlinburg, Tenn.

†From the Department of Surgery, University of Tennessee College of Medicine, Memphis, Tenn.

The etiology of gastric carcinoma remains obscure but there are accumulating data, currently incomplete, to suggest that diet may be a factor. Also, there appears to be a higher incidence of the disease among patients harboring adenomatous gastric polyps and in patients with pernicious anemia and atrophic gastritis. It was formerly taught that gastric cancer in many instances arose in a pre-existing gastric ulcer. Currently most authorities feel that practically all gastric cancers are cancers from the beginning, but the possibility of an occasional ulcer undergoing malignant transformation is accepted by both pathologists and clinicians. To encounter gastric carcinoma in a patient with active duodenal ulcer or in the patient who has had a duodenal ulcer is rare, but the combination does occur. Also cancer has been reported in the gastric remnant of patients who have had resection for duodenal ulcer.

Surgical History

The first attempt at extirpation of the pyloric portion of the stomach for carcinoma was credited to Jules Péan, the famous French surgeon, in the year 1879. Unfortunately the patient did not survive the operation. Péan, after removing the growth, did an anastomosis of the duodenum to the lesser curve of the stomach. In 1880, Ludwig Rydygier, a Prussian surgeon, likewise performed an unsuccessful pylorectomy for malignant disease. He re-established continuity by an anastomosis of the duodenum to the greater curve of the stomach. On January 29, 1881, Theodore Billroth performed the first successful pylorectomy and used the lesser curve of the stomach for anastomosis to the duodenum. Shortly thereafter he performed a second pylorectomy and again used the lesser curve of the stomach for the anastomosis. In this patient there occurred an outpouching or bulge at the closed end of the greater gastric curvature which impinged on the gastroduodenal anastomosis, causing obstruction and death of the patient. Thereafter Billroth employed the greater curvature of the stomach for anastomosis to the duodenum following extirpation of malignant pyloric growths.

In September 1881, Anton Wolfler, working in Billroth's clinic, explored a patient with an inoperable carcinoma of the pylorus. At the suggestion of Dr. Carl Nicalodoni of Innsbrook, who was a visitor in the operating suite, Wolfler simply performed a long antecolic gastrojejunostomy to relieve the impending obstruction.

In 1885, Billroth operated upon a patient with a pyloric carcinoma who was gravely ill and considered a poor operative risk. He performed a Wolfler type gastrojejunostomy with his usual rapidity and meticulous skill. At the completion of the bypass the patient was doing well so Billroth elected to remove the tumor. Following its extirpation both the duodenal stump and entire cut end of the stomach were closed. Thereupon was born the classic Billroth II type reconstruction.

During the several years that followed various modifications of the Billroth II method were devised by Kronlein, Milkulicz, Von Haecker, Polya, Moynihan, Reichel and others. Extended gastric resections in which two-thirds to three-fourths of the stomach were removed were performed first by Finisterer and Von Haberer. Alimentary continuity was usually re-established by variations of the Billroth II techniques.

Total gastrectomy for treatment of gastric carcinoma was first performed by Conner of Cincinnati in 1884, but the patient did not survive. In 1887, Schlatter of Switzerland carried out the first successful total gastrectomy. The first such operation performed in America was by Brigham in 1887 at St. Luke's Hospital in San Francisco. The patient survived for a number of years.

During the next four decades isolated case reports of total gastrectomy appeared in the literature, but the operation was not performed on a wide scale due to the high operative morbidity and mortality. In the early 1940's Pack stated that the operative mortality for total gastrectomy varied from 38 to 40% and the results among the survivors were indeed poor.

The late 1940's and early 1950's brought about a renewed enthusiasm for total gastrectomy. Indeed, surgeons as Lahey and Wangensteen advocated the procedure or even an extended total gastrectomy for all operable gastric malignancies irrespective of the location of the lesion in that organ. This concept resulted from the discouraging results reported with other conventional modes of surgical treatment. Also, with improvement in surgical technique, blood replacement, antibiotics, excellent anesthesia, and advancement in pre- and postoperative care, it was felt that total gastrectomy could be performed with less risk than in previous years. During the next 15 years the operative mortality for total gastrectomy in surgical centers declined from a figure of 40% to a respectable 5% level. However, this fall in operative mortality by no means produced an increase in overall 5-year survival. As result, today there are still some surgeons who routinely employ total gastrectomy for all instances of gastric malignancy deemed operable, but the majority believe that comparable results can be obtained with radical subtotal gastrectomy. Most gastric surgeons restrict total gastrectomy to the treatment of extensive infiltrative lesions, huge polypoid tumors, and growths located in the proximal one half of the stomach.

Present Concepts of Treatment

In my opinion the choice of operation for gastric cancer depends upon the location of the lesion, its estimated extent, and the general condition of the patient. For tumors in the distal pyloric region, a radical resection of approximately 70 to 75% of the distal stomach is performed, removing the greater and lesser omentum. Several centimeters of the duodenum beyond the pylorus is included in the dissection as it is well established that a high percentage of pyloric malignancies extend over into the duodenum. It has been our policy to transect the duodenum just proximal to the entrance of the biliary and pancreatic ducts. In treatment of operable lesions located in the antral segment or lesions near the junction of the antrum and corpus, a more extensive resection is performed, including removal of the spleen and its lymph draining area in continuity. Again, the omenta are included with the specimen along with a generous cuff of duodenum. Extensive infiltrative lesions and growths occupying the proximal portion of the stomach are treated by radical

total gastrectomy and splenectomy with removal of several centimeters of the distal esophagus.

In certain cases where the carcinoma is adherent to the pancreas but distant spread is absent, portions of the pancreas are removed en bloc with the specimen. Also, some greater curvature lesions may necessitate removal of the transverse colon and mesocolon in order to eradicate the entire disease. Such extensive operations, however, require considerable experience and judgment. If the root of the transverse mesocolon and periaortic nodes are involved with neoplasm, radical removal of contiguous organs proves but a foolhardy surgical exercise.

Total gastrectomy, in my opinion, has a limited, but definite place as a palliative operation in the good risk patient with an extensive gastric lesion. However, when tumor has spread to the liver, diaphragm and other adjacent viscera, total gastrectomy with removal of portions of these structures is to be condemned.

Following radical subtotal gastrectomy performed for carcinoma one of the Billroth II methods of alimentary reconstruction is usually employed. An antecolic gastroenteric anastomosis is more readily accomplished following radical subtotal resection. Should additional operation prove necessary in the future the antecolic anastomosis is more accessible and allows ready access to a pouch reconstruction if the surgeon should at some future time elect to employ such reconstruction in a long term survival. The Billroth I reconstruction is less frequently employed following resection for carcinoma. This method in the patient with a small gastric remnant may lead to duodenal reflux and regurgitation. Also, the Billroth I reconstruction should not be employed following removal of a pyloric lesion for should a localized recurrence develop, gastric outlet obstruction will rapidly ensue.

The most frequently used modes of alimentary reconstruction following total gastrectomy are esophagojejunostomy with Roux-en-Y anastomosis and esophagojejunostomy with enteroenterostomy. Esophagojejunostomy without complimentary diversion and esophagoduodenostomy are less frequently used and more conducive to reflux esophagitis.

There has been enthusiasm in recent years for pouch replacement procedures following total gastrectomy performed for carcinoma. Segments of small intestine fashioned in single, double, triple, circular, and exotic loops have been described. Some of these pouches are connected to the duodenal outflow tract while others exclude the duodenum entirely. In my opinion, the vast majority of patients who undergo total gastrectomy should have a reconstruction with esophagojejunostomy accompanied by a complimentary diversion procedure. Pouch replacement operations have a limited but definite place. They should be given consideration only when all circumstances are deemed favorable. The patient must first be faring well at the completion of total gastrectomy, thoughts of a possible long term survival and a favorable lesion must have been encountered at operation, and an experienced operating team must be present. The patient who is of slender build and who had a problem with weight gain prior to developing gastric carcinoma is considered more a candidate for pouch replacement than is the individual who was robust and well nourished before developing carcinoma.

Results

Although there has been some improvement during the past two decades, the results following operation for gastric cancer are still discouraging. The overall 5-year survival ranges from 3 to 15% in most surgical centers. There has been an increase, however, in the resectability rate for this disease, and also an increase in the number of palliative operations which have proved of benefit. The best survival rates have been in individuals who have had resectional operation with the intent to cure and in whom evidence of nodal spread has been absent. This is admittedly a select group and represents only a small percentage of the total number of patients presenting with a gastric malignancy. In this select group the 5-year survival ranges from 25 to 45%.

Although the overall results obtained with gastric cancer are discouraging to the

surgeon, one should continue to treat this disease with an aggressive surgical approach whenever possible.

Carcinoma of the Colon*

HARWELL WILSON, M.D.,†
Memphis, Tenn.

In the ten minutes allotted, I should like to review briefly some important features regarding carcinoma of the colon in order to provide a background for the question and answer period led by Dr. Scott later in the afternoon.

Carcinoma of the colon is certainly of interest to almost everyone here and rightly so, when one considers the high incidence of the malignancy. Carcinomas occur more frequently in the colon than in any other organ. In addition to the fact that the colon is the site of malignancy in so many instances, it also is important to remember that the results which may be expected from proper diagnosis and treatment in cases of carcinoma of the colon are much more encouraging than is true of carcinoma of the tongue, the esophagus, pancreas or lung. These facts make it necessary for all of us to be very aggressive as regards diagnosis and management of these malignancies.

A slide is presented to show the areas of the colon where malignancies most frequently are found. This reminds us again that the great majority of these tumors are located in the rectum and the rectosigmoid portion of the colon. A small percentage of these cases, as is shown, are found in the cecum and the transverse colon and a few such malignancies in any series are to be shown in the ascending or descending colon. The fact remains, however, that an adequate rectal examination combined with a good sigmoidoscopic examination will reveal the presence of the majority of malignancies which occur in the colon and rectum. The rectal examination, of course, is an important part of any complete physical examination. It might be wise to point out, however, that many tumors which occur high in the rectum can be felt by the examining finger if the patient is supine or in the lateral recumbent position whereas many of these same tumors may be missed if the patient is examined by having him bend over the examining table in the upright position, a position frequently used to palpate the prostate gland in the male.

In a consideration of carcinoma of the colon it is wise to recall the important differences between the right and left colon. It is readily apparent that the significant anatomic and physiologic variations between the right and left colon play an important part in the interpretation of symptoms. Since the lumen of a sigmoid colon is much smaller than that of the ascending and transverse colon, it is only natural that many patients who develop carcinoma of the sigmoid colon should present with signs and symptoms of obstruction. The lumen of the right colon, combined with the fact that the contents of the right colon are liquid, the function of the right colon being the absorption of fluid, causes obstruction to occur much later when the lesion is on the right side.

The important diagnostic procedures used by all of us begin with a careful history and physical examination including the digital examination of the rectum. This is followed by the sigmoidoscopic examination. The use of repeated stool examinations for occult blood by the guaiac test should not be overlooked. A positive guaiac test frequently may be the deciding factor in having the barium enema performed in a patient who otherwise might not be suspected of having a malignancy of the colon. The barium enema is much more meaningful when the patient has been properly prepared.

As regards diagnosis, it has already been mentioned that obstruction is frequently an early symptom in patients who have carcinoma of the left colon. It is also true that the appearance of a moderate amount of blood in stools should suggest the possibility of a malignancy in the left colon. Truly massive bleeding from the large bowel occurs more frequently in patients who have diverticulosis than in patients with carci-

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noma. However, it has been observed in both groups. Early symptoms exhibited by patients with carcinoma of the right colon are frequently quite indefinite. There may occur a change in bowel habits. This may consist of constipation, diarrhea, or simply an awareness or consciousness of bowel function when previously no thought had been given this. Frequently, there are only mild digestive disturbances with few or no localizing signs. Weakness and anemia not infrequently are the reasons for a patient with carcinoma of the right colon to consult his physician. A surprising number of cases of carcinoma of the right colon are found by the hematologist who makes a barium enema in an attempt to determine the cause of the iron deficiency anemia. In an occasional instance the patient will have no symptoms until a mass is found on the right side.

Slides were used to illustrate some points which constantly should be borne in mind. The first illustration was that of a carcinoma involving the cecum, the primary tumor being approximately 4.5 cm in diameter. Of importance in this instance is the finding in the midportion of the ascending colon, another carcinoma the second being only 1.5 centimeters in size. We must remember that patients with carcinoma of the colon may have more than one primary malignancy. These tumors may be multicentric in origin. Another illustration showed an intussuseption of the cecum with the ileocecal valve and terminal ileum in the ascending colon; we saw immediately on the surgical section of the specimen that the leading point of the intussuseption was a carcinoma at the ileocecal valve. This slide reminds us of the fact that intussuseption in the adult is most frequently associated with the presence of a tumor. All of us know that intussuseption in the child of 2 to 4 years of age usually has no demonstrable cause. Reduction of the intussuseption in the small child is only infrequently followed by recurrence. In the adult, however, intussuseption is almost always produced by the presence of a tumor. Because of this, in most instances where this occurs in the adult, it is preferable to proceed with a resection rather than to seek reduction of the intussuseption. The patient whose specimen is shown in the slide with the massive intussuseption was a 57 year old woman who suddenly developed a large painful movable mass in the right lower quadrant of the abdomen. On examination this suggested the possibility of a large twisted ovarian cyst. The operation was done on an emergency basis, and when the true picture was found, the right half of the colon was resected with a good result.

Another slide showed a large polyp in the descending colon. There has been quite a bit of discussion as to whether or not polyps may change from the benign to the malignant state. The issue has apparently not been settled as yet to the entire satisfaction of everyone. The important point to be emphasized is that a polyp whose base shows malignant cells invading the muscularis should be treated as a patient with frank carcinoma. On the contrary, if the stalk of the polyp is entirely free and malignant cells are seen only at the distal part of the polyp, patients may be treated successfully by removing the polyp along with an area of a centimeter about its base. We are not aware of any proved cases of distant metastases from patients so treated.

Another slide showed an x-ray picture demonstrating an obstructing lesion of a very high degree in the rectosigmoid area. This patient had been diagnosed as having carcinoma of the colon. However, a careful examination of the history revealed that on at least two occasions a little blood had been noticed in the stools at the time of the patient's menstrual period. This suggested the possibility of endometriosis being a possible cause of the obstruction. The presence of carcinoma seemed much more likely. Following slides demonstrated that this fortunately proved to be a case of obstruction of the sigmoid colon secondary to endometriosis. In the unopened specimen, were seen the small bluish dot-like areas in the constricted area characteristic of endometriosis. The open specimen, showed the mucosa to be intact. This area was resected, end-to-end anastomosis carried out and local areas of endometriosis were resected from the ovaries and in certain areas without performing a radical operation. All of us are very glad when what appears

to be a very discouraging prognosis is changed to one which has a much brighter outlook.

Since all of us are interested in technique, I would like to mention a few points which I believe have been of importance in improving results in surgical treatment of carcinoma of the colon and I would also like to emphasize the fact that treatment of carcinoma of the rectum by local excision or cautery has very limited application and usually is strongly contraindicated. The use of ligatures or umbilical tapes placed well above and below the malignant tumor to prevent the migration of cells into the lumen during the resection as emphasized by Dr. Warren Cole is believed to be useful. Also, we believe the interruption of the venous return from the tumor, as also advocated by Dr. Cole prior to handling the tumor, is important. Dr. Isidore Cohn has pointed out that the use of iodinized chromic catgut at the site of the anastomosis in his hands has decreased the number of recurrences at the suture line. Suture line recurrences are seen relatively infrequently when the tumor is widely resected. Dr. Rupert Turnbul has emphasized the significant improvement in results which may be obtained by the "no-touch" technique. Certainly, it appears from his studies that avoiding manipulation of the tumor at the time of operation provides a definitely better rate of cure.

In a very exceptional case, such as the very poor risk elderly patient who recently may have had a coronary occlusion and who has a carcinoma of the rectum, local excision or the use of cautery may be justified. It should be emphasized, however, that this is certainly not adequate treatment for the disease and even though the local area may appear to be free of the disease, one has no assurance that a lymph node located one or two centimeters away has not been missed.

As mentioned earlier, this review has been given in order that it may provide a basis for the further exchange of our ideas during the question and answer period to be led by our moderator, Dr. Scott. Thank you.

Squamous Cell Carcinoma of the Anus*

JOHN L. SAWYERS, M.D.,†
Nashville, Tenn.

Epidermoid carcinoma of the anus has been an infrequent disease in which a variety of therapeutic measures have been employed. Controversy has existed among radiologists and surgeons as to the best management of this problem. Surgeons have advocated various approaches, ranging from conservative local excision to abdominoperineal resection with simultaneous bilateral radical groin dissection. Whereas the treatment of adenocarcinoma of the rectum is well standardized and familiar to the surgeons, such knowledge is lacking regarding epidermoid carcinoma of the anus. This scarcity of information can be explained by the comparative rarity of this tumor.

At the Vanderbilt University Medical Center, carcinomas of the anal canal comprised 2.3% of malignant tumors of the colon, rectum, and anus. The age distribution ranged from 28 to 76 years with the majority of patients being in their seventh decade. The occurrence rate is slightly higher in women than in men.

These tumors may be associated with benign anorectal lesions. Twelve of our patients had concomitant hemorrhoids; 4 had fistulas-in-ano; 3 had condylomata acuminata. Fistulas and chronic anal lesions are favorable sites for occurrence of this cancer.

Presenting symptoms usually are rectal pain and bleeding. No patient in our series was entirely asymptomatic and many had several complaints. Duration of symptoms ranged to more than 4 years with the majority of patients having been symptomatic for more than 6 months. Ten patients had been treated by their physicians, or treated themselves for hemorrhoids before the cancer was diagnosed. This tumor is frequently overlooked by the patient and the physician for a significant period. Adequate anorectal

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examination with biopsy of any suspicious lesion should lead to earlier diagnosis.

Cancer of the anus spreads by direct extension by the lymphatics, and by the blood stream. Direct extension into the perianal tissues and sphincter muscles is frequent. Because of this tumor's tendency to spread locally, perineal recurrences are a frequent cause of treatment failure and indicate the need for wide perineal dissection.

Tumors arising in the anal canal metastasize to the perirectal and mesenteric nodes as well as to the inguinal nodes. Lymphatic spread to the inguinal nodes may occur by two routes—(1) across the perineum and over the upper part of the thigh to the superficial inguinal nodes, or (2) along the middle hemorrhoidal lymphatics to the hypogastric and obturator nodes and from there retrograde to the external iliac and inguinal nodes. Fifteen of our patients had metastases to the inguinal nodes. Distant metastases via the blood stream are infrequent, and less than 10% of our patients had liver metastases, including those examined at postmortem.

Unlike the treatment of adenocarcinoma of the rectum, there has been no standardized treatment for squamous cell carcinoma of the anus. In our group irradiation, local excision, and abdominoperineal resection have all been used. Irradiation alone for epidermoid carcinoma of the anus has not been utilized widely in this country. Seven of our patients had irradiation, and all died of their tumor within less than 3 years. Local excision of epidermoid carcinoma has been ineffective in treating tumors involving the anal canal. Wide local excision may be used in small, low-grade perianal carcinomas which are noninfiltrating, but these patients must be observed closely for metastasis to the inguinal nodes.

Abdominoperineal resection has been the usual treatment for squamous cell carcinomas arising in the anal canal. The standard Miles resection should be enlarged by high ligation of the inferior mesenteric vein, ligation of the inferior mesenteric artery at the aorta and wide removal of the perineal skin, including the contents of the ischiorectal fossa, and division of the levator muscles close to their origin. In women the entire posterior wall of the vagina and posterior half of the labia are excised with the tumor.

Fifty per cent of the failures of abdominoperineal resection in our patients were the result of perineal recurrence and indicated a lack of appreciation for the difference in doing abdominoperineal resection for adenocarcinoma of the rectum and abdominoperineal resections for epidermoid carcinoma of the anal canal. The latter disease necessitates such a wide perineal dissection that the wound cannot be closed primarily and requires packing.

The 5-year survival rate in the 29 patients who had abdominoperineal resection was 52%. A review of the published results for treatment of squamous cell carcinoma of the anus from 1958 to 1964 shows a 50% five-year survival rate from surgical treatment. Survival rate in Stage I and Stage II lesions was 61.3% as compared to 72.9% for 5-year survival for Stage I and II lesions of adenocarcinoma of the colon and rectum.

Controversy exists regarding the treatment of inguinal node metastases with this disease. Prophylactic dissection of the groin has been advocated by some, but most studies show that such prophylactic dissection would salvage very few patients and would lead to unnecessary groin dissection in many patients. Our present opinion is that a therapeutic radical groin dissection should be performed only if the inguinal lymph nodes become affected, but not as a prophylactic measure. All patients must be followed carefully after abdominoperineal resection. If nodes in the groin become involved, unilateral radical dissection of the inguinal nodes is performed.

Summary. Epidemoid carcinoma of the anus arises in a location that permits early diagnosis by inspection and palpation. However, this tumor has frequently been overlooked by both patient and physician. It may occur in association with other anorectal conditions. Chronic rectal conditions such as anal fistulas, venereal lymphogranuloma and condylomata acuminata should have definitive early treatment as these conditions are thought to possess a tendency toward malignant degeneration. Thorough anorectal examination with biopsy of any suspicious lesion should lead to earlier diagnosis and improvement in surgical treatment of these tumors.

STAFF CONFERENCE

Vanderbilt University Hospital*

Psychiatric Problem—Rejection

JOSEPH WEINREB, M.D. (Associate Professor of Child Psychiatry): The case presented here is an illustration of a child's reaction to exposure to a number of difficult situations, all of which appear to be obvious in accounting for his symptoms, yet the really important underlying pathology is concealed behind the obvious and dramatic, and mentioned only once among all of the professional people that dealt with the situation.

J. E. DOZIER, M.D., (Resident in Child Psychiatry): The patient is a 10-year-old boy of mixed Asian-Caucasian parents who was admitted with the complaint of aggressive behavior in school toward peers and teachers and now this aggressive behavior has spread into his home life to the point that his mother has been unable to control him.

Development of Symptoms: Since Stuart's family has moved about a great deal because of the father's military service, Stuart recalls that he has always had difficulty getting along in school and with people, and that he tends to argue if things don't go his way or if he doesn't get what he wants. He feels that other children are making fun of him because he is oriental. Stuart has gotten into trouble on several occasions when he attempted to defend his heritage. He states that he gets along so much better on military bases because he is not so different there. Over a year ago the family moved to Nashville. Since coming to Nashville, Stuart has had a gradual increase in his difficulty relating to people. He would get into arguments and fight with boys in his neighborhood when things didn't go his way or if "I got mad." He also began to get into more and more arguments and fights at school. Stuart told me that in school if you don't show people you are boss then they will run all over you. So it seems that Stuart began to feel that he had to fight in order to prove himself and at the slightest provocation he would fight usually feeling that people were making fun of him because he is oriental. He also began to have difficulties at home getting into more and more arguments with his brother and mother. Stuart states that his father could control him and that he did fear his father when he misbehaved so that he did not misbehave when his father was home. When his father left for Vietnam some six months ago all of Stuart's problems intensified. He became uncontrollable at school so that on one occasion he struck the teachers. At home he semed to want to indicate to his mother that he felt she didn't care anything about him and that she favored his brother. He would get into arguments with his brother over simple things such as what television programs to watch and then when his mother attempted to make peace between the two of them he would go into a rage stating that she didn't love him, but was taking the side of his brother. On several occasions he ran away from home though he was easily found and returned. He had several rage episodes in which he either threatened his mother's life or his own.

Toward the end of the last school year the problems became so great that he was seen by a psychologist through the Mental Health Clinic and his mother was seen by one of the social workers at the Nashville Mental Health Center. It was arranged at that time for Stuart to go to Cumberland House, but while these arrangements were being worked out, Stuart had a severe episode in which he became uncontrollable and threatened to kill himself. His mother threw him on the bed and called their preacher who came over and suggested that they call the police. They called and Stuart was brought to the emergency room where he received a sedative. By the time he got to the emergency room he was quiet, but Stuart admits that he was in a rage while at home, kicking and striking out and screaming loudly. It was very shortly after this episode we were contacted and I arranged to admit Stuart to the Child Psychiatry Division.

*From the Division of Child Psychiatry, Department of Psychiatry, Vanderbilt School of Medicine, Nashville, Tenn.

Current Medical Status: General health is good.

Psychiatric Status: Though Stuart is obviously very bright, his aggressive behavior stands in the way of achievement at school. Stuart's mother feels he is intelligent, but also feels he does not use his abilities constructively.

Stuart is a rather large 10 year old who seems to be a strong boy. His physical appearance demonstrates his Caucasian-oriental heritage. He is active both at home and at school. Though he participates in active sports, fishing is his favorite sport.

Stuart feels rejected by his father; on one occasion he cried and said he wished his father would come back home. Early in hospitalization when he was angry because he couldn't go home, he said his mother didn't love him and had never loved him, and that if his parents loved him he wouldn't be in the hospital. He ended by saying that since his parents didn't care about him, he didn't love them, so he didn't care whether or not he went home. After a few days, he was talking about loving his mother and wanting to be with her (and her wanting to be with him) rather than in the hospital. Stuart has shown no sex play on the ward and has not mentioned sex in the therapy sessions. He does express an indifference to girls who have been in his classroom.

Stuart often in the past has not controlled his hostile and aggressive impulses. When someone "makes fun" of him he attacks them verbally and physically. At school he must be "boss" so he won't get into fights, since if he were not the "boss" he would have to fight all the boys. He has a pattern at home of being destructive when he is frustrated, e.g. he has smashed several boat and plane models when he would make a mistake in putting them together.

Stuart is well oriented to reality for the most part. He tends to be paranoid, since he feels that any teasing or rough play is directed at him because he is oriental. When he was talking about birth places with one of the patients, the patient appropriately made the remark that he looked as if he had been born in Japan. Stuart became angry and started fighting. Recently he has shown more control over his behavior.

Stuart is a bright, nice looking boy who is neat and in the therapy room well dressed. He carries on a pleasing conversation. His quick temper is the only social liability that I have noticed. Stuart did show separation anxiety and has in my presence both cried and expressed anger at me because we "took him away from mother." He often denies that he has any real problem with his temper. He seems to be trying to please us now so as to get to go home as soon as possible (this is not to say he has not made some real gains in understanding and controlling his behavior).

The major identity figure in Stuart's life seems to be his father. He talks often with me about the letters he gets from his father.

Stuart's self-image seems ambivalent. I feel he does know that he is a bright boy (on one occasion he said he wanted to be a doctor, a psychiatrist). However, he also feels he is bad. Perhaps it goes like this: I'm oriental—I'm different from others. Things that are different are either better or worse. Boys kid and tease me and call me a "a dirty Jap" so I must be worse rather than better.

Therapeutic Situation: In the office Stuart is well controlled and talks about wanting and needing to control his temper. His resistance, which at times is obvious, stems from at least two things. First, if he were to admit his needs of love and affection from his parents, his father might feel he was not being "a tough little soldier." Second, he wants to go home so he wants everything to seem to be just fine with him. In his therapy sessions, Stuart has made several models; his work with the models has been very good. At present I seem to represent a father to Stuart. He became very angry at me one day and told me that he hoped I got drafted, sent to Vietnam and killed by the Viet Cong, because I just wanted to rule his life and wasn't really interested in what he wanted to do.

Conclusions: Stuart feels rejected because he is oriental. His anger toward his mother, which has been expressed in the past, may partly be explained by the fact that after all she is the one that caused him to be part oriental. He certainly must feel angry at her also because she has not controlled his behavior which must be frightening to the boy.

Diagnosis: Adjustment reaction of childhood (passive-aggressive personality pattern—aggressive type)

Therapeutic Aims:

(1) Help Stuart accept himself as being a "good" person (accept his oriental ancestry).
(2) Improve his relationships with peers at school and at free play.
(3) Help him to work through his feelings of rejection by his parents.

Therapuetic Program:

(1) Active school participation.
(2) Active ward participation.
(3) Psychotherapy.
(4) Stuart may be placed in Cumberland House (this was the plan prior to admission)
(5) Mother is in casework through the Nashville Mental Health Clinic.

Social History

KATHLEEN DEPIERRI, (Social Worker): This patient presents several problems including poor performance in school, rebelliousness toward all authority, mood swings, talk of suicide, and rage reactions. Stuart has very superior intelligence—full scale I.Q. 141.

Background History: Stuart is the natural child of an oriental mother, and American Caucasian father. Both Mr. and Mrs. ——— participated in the evaluation. Mrs. ——— has been having trouble with Stuart since he was a baby. He has always been more rebellious than her other son by this marriage. Mrs. ——— has a daughter by a first marriage to an oriental. This marriage was ended in the husband's death due to tuberculosis. This girl, now 16, is described as being quite well-adjusted. She has been subsequently adopted by Mr. ———. David, who is the next oldest is described as being good-natured, easy-to-handle, and a gentle boy. Stuart has feelings of being inferior, believes his mother does not like him, steals periodically, lies, and feels the world is against him. He has a strong desire to have his father with him all the time, but Mr. ——— who is a Sgt. in the United States Army, is away most of the time. Mrs. ——— is very unhappy with this arrangement, states that she recognizes that this is a means whereby her husband removes himself from the home because it is difficult for him to relate to the children and to her. She describes him and he agrees, that he is fairly distant with people, very compulsive, needs to achieve, and needs a great deal of recognition. He comes from humble origins, and by his own intelligence and will, has pulled himself up to his present rank and station in life. He is never satisfied and must always prove to himself and others that he is adequate and superior. At home he removes himself from the family and stays in a room behind locked doors studying foreign languages. He is intensively interested in the Far East and is studying Mandarin and several other dialects. He has done very well always winning top honors in his class. He states the dream of his life is that when he retires he would like to go back to Asia and live in the oriental style of life.

He recognizes that Stuart needs help, and yet it is difficult for him to get through to Stuart and communicate in a way that is accepting and understanding of what is being said. When Mr. ——— is with Stuart, he improves in his general behavior and attitude toward others. When Stuart is with his mother or any other authority figure he tends to rebel. Stuart needs an inordinate amount of praise and recognition for his accomplishments. He is described as having a very "heavy inferiority complex."

The family feels that the problem actually worsened last year when Stuart took an IQ test (administered by Metro schools) and was to be placed in a gifted class in another different school. This meant a great deal to him and he was the only one in school who had been given this honor. He bragged about it, and his class, or course, knew about it. When the Metro budget did not permit the development of the gifted class, Stuart remained where he was. He became depressed and began to regress in all of his studies, and his general behavior deteriorated to what it is at present.

Stuart has talked about suicide and feelings that he does not want to live, that there is no purpose in his life. This is very similar to the way his mother has felt in the past year. Her background is one of considerable tragedy, having grown up during World War II, in Asia not having an opportunity to complete high school and study as much as she wanted because of the bombing. She met Mr. ——— who impressed her as being outgoing, fun-loving, and a

"very fine person." It was not until their marriage that he began to manifest his compulsive traits, his stern authoritarian manner in dealing with life and people about him. His rigidity also has been much of a problem to her. She feels she cannot talk to her husband. He becomes uncomfortable and tunes her out and leaves. He is always being assigned to places where he cannot take his family with him, and she sees this as a means whereby he escapes from his family. Several times separation or divorce have been eminent.

Mrs. ——— is to pursue a vocational rehabilitation and be trained in order that she can find some meaningful rewards for involvement with the children; she has no outlets, no friends, and feels very lonely and depressed especially when her husband is not home.

Birth and Developmental History: Stuart is a natural child, and during gestation the mother's health was good, but she was greatly fatigued and experienced a lot of anxiety because of the adjustment to the U.S. She had to learn the language, and learn different cultural ways of dealing with her environment. Delivery was trouble-free and Stuart was a full-term baby. He was bottle fed for one year and experienced no eating problem. Toilet training, which was uneventful, was begun at age 10 months. Toilet training lasted 14 months. Walking was at one year, words at one year, sentences at two years; Stuart has never experienced high temperatures exceeding 105 degrees. He has had good healthy physical history.

His behavioral symptoms were excessive crying between the ages of 2 to 4 months—obsession with eating sweets, which persists to the present, starting at age 3—temper tantrums starting at age one year to the present—fighting and quarreling starting age 8 to present—lying beginning at age 5 years to the present—fears, fire setting and anxious state starting at age 5 to the present.

Stuart was born during Mrs. ——— most difficult time. She was quite depressed during his early years, and she blames herself for much of Stuart's present problems, although she is very angry at her husband for not having involved himself more as a family man. She is gradually overriding her depression, and is able to set firmer limits with Stuart and give him more time and attention as well.

Mrs. ——— has agreed to come for counseling with me at the Neighborhood Counciling Center and is in therapy as of three weeks ago.

B. L. ATKISON, Ph.D., (psychologist): Various tests including the Rorschach, the Peabody Picture Vocabulary Test, the House-Tree-Person, and the WISC (Verbal Scale Only) were administered to the patient.

Behavior: The patient was quiet but cooperative. He remained attentive throughout the testing sessions. He showed no spontaneous verbalization but could easily be engaged in conversation. The patient was nervous during the sessions, and his hands trembled slightly when drawing. The patient showed some frustration with his performance on the WISC.

Test Results: The patient obtained a Vocabulary Quotient of 136 on the Peabody and a Verbal I.Q. of 138 on the WISC. This suggests that the patient is of superior intellectual ability.

In spite of the patient's superior performance he was dissatisfied with how he did. The patient sets extremely high goals for himself, making failure to meet those goals almost inevitable. He reacts to this failure with frustration and hostility.

In addition to the anger resulting from failure, the patient also shows hostile denial of his own dependency needs. Much of his acting-out behavior may represent this denial of his own feelings of dependency. When the patient's anger is turned inward, he experiences depression to an extent which distorts his perception of reality and reduces his ability to cope with stress. The patient probably works very hard at fighting his feelings of depression and trying to meet his unrealistically high level of aspiration.

Teacher's Evaluation

H. D. ASKEW, (Teacher): Stuart is a 10 year old Japanese-American boy of above average height and weight. He is pleasant, and polite. After arriving in class he seemed in a quiet mood and well oriented to his surroundings. He was eager to begin class

work, but after a few days appeared to have periods of depression. Stuart would have to be reminded to keep his mind on his lessons.

In the past week Stuart has become very talkative. His gestures, speech, and general conversation are masculine and appropriate. The topics of conversation would indicate a person that is well read. Stuart is interested in most sports and performs fairly well. He is willing to attempt the activities during P.E. time.

Relationship to Teacher: Stuart responds well to his teacher and for all practical purposes there is a good relationship. The only affection shown to his teacher was a hand shake. There was one act of aggression toward his teacher for not showing immediate attention to his question.

Relationship to Other Children: Stuart seems to fit well into the class. At first he had the kids believing he was a Karate expert. He enjoys playing games with others, however, at times, he needs some encouragement to get started. He has some difficulty in tolerating losses. In the past two weeks (Robert) and he are having trouble getting along. Robert has been nagging Stuart and for this, Stuart has shown some aggression toward Robert.

Work Habits and Attitudes: Stuart works diligently at his lessons if he is not in a depressed mood. There has not been an uncooperative attitude when reminded of his assignment.

Achievement in School: On the Wide Range Achievement Test, Stuart scored as follows: Reading 7.5; Spelling 5.0; and Arithmetic 4.7.

Currently Stuart is working on high seventh grade level in reading. He demonstrates that he is well-read because of the many subjects he discusses with ease. In arithmetic, Stuart is now working on 5th grade level. He is having no difficulty and with proper guidance should be working on 6th grade level in a few months.

Intellectual Functioning: In academic subjects, Stuart functions a little below his capacity indicated on individual intelligence tests. On the P.P.V.T. Stuart scored an I.Q. of 125 and on the Columbia Mental Maturity Scale he scored at I.Q. 152 when examined by Dr. A. H. Solomon in November of 1968.

Attitude to Responsibility: He seems trustworthy and does not rebel when limits are set. At school, he has respected other children's property. Assign him a job and it will be done.

Fantasies Expressed: None observed.

Special Problems: Periods of intermittent depression; sporadic aggressive behavior.

Educational Plans: A varied and enriched education program to encourage utilization of his superior intellectual ability. To search for special talents and interests. Seek acceptable expressions of aggressions.

VIRGINIA RACKER, R.N. (Psychiatric Nurse): Stuart is a handsome well-built 10 year-old boy of Japanese-American birth. He is above average height and weight for his age. At times he shows much maturity and insight.

He reacts readily and aggressively to his peers if any references are made to his Japanese heredity in either a positive or negative way. He relates easily and intelligently with most adults—is able to participate in meaningful conversation in a variety of subjects. He recognizes his problem as "not getting along with children." He readily admits he has a bad temper, often he withdraws to his room to help himself control his temper, is fearful of hurting others. In his anger he is very abusive both verbally and physically. He realizes he needs to work on his own problems regardless of other's problems.

Stuart told his mother that he deliberately planned his behavior at home to have everyone feel sorry for him and to gain attention (attempted suicide and run away). He has threatened to run away from the division. Stuart is well oriented in time, place, and events on and off the division. Stuart feels that when his father is home he is never ill. He associates all physical illness to the father's various departures. Also, states he could control his temper better because his father couldn't tolerate it and he feared him. Stuart feels his mother misled him to have him admitted to the hospital, feels she "put him out."

Stuart seems to be comfortable with most adults. However, he is more defensive with smaller (in stature) female staff. With them he seems to feel he needs to prove he

is superior. He responds favorably to males. Stuart is able to express anger to and about adults after he calms. Stuart is pleasant and able to be reasoned with very well most of the time. Stuart can manage his personal grooming well, but needs verbal encouragement to pursue it. He resists baths, changing clothes, and anal hygiene. He says he does not like others in the bathroom for baths, so times alone have been arranged for him. Stuart sleeps well. Begins the days very slowly and is very quiet. By noon he is usually more active and verbal. He expresses his feelings of homesickness, desire for his mother, tearfulness as hour of sleep approaches. Stuart refuses to eat some meals, but eats well at others. He does, however, come to table with groups. Lunch is his best eating period. His weight has been above normal.

J. WEINREB, M.D.: In summary, the following facts have been brought out in this case:

The patient is a ten year-old boy.

He is bright.

His father is away in the military service for lengthy periods.

The father is distant from the family when he is home.

The mother is Asian and had problems adjusting to America.

The patient has the mother's physical features.

So, what is new about any of these facts? There are millions of bright ten year-olds who are not overly aggressive and get along fine despite the indifference or even absence of a father. This also holds true where there is a racially mixed, or culturally mixed marriage. Why should this particular ten year-old boy have all this trouble including threatening suicide? Why should he resent so much any reference to his physical appearance, which resembles his mother? This happens to look good on him and so far as we can see is not held against him by his peers or anyone other than himself. Yes, we see bright children who are more difficult to satisfy, but why does this one not use his superior intelligence to help in his adjustment as most children of superior intelligence do?

Why does this boy talk so much about not being loved by his parents, when they do show concern and responsibility and have made every reasonable effort to satisfy him? This child is so sensitive to rejection that the slightest inattention either by the mother, teacher, nurse, or other children arouses intense anxiety and hostility in him. This kind of sensitivity does not develop at age ten or eight or six years of age. This kind of sensitivity has to develop in the first year of life or thereabouts. The really important answer to our puzzle is given to us by Miss DePierri, the social worker from the Neighborhood Counciling Center when she describes the early developmental history. Why the excessive crying between the ages of two to four months? Why the early craving for sweets? Why the temper tantrums beginning at one year? Miss DePierri also gives us the information that the mother was severely depressed during this period and admits to not being very attentive during his very early life.

It is this early rejection that started all the trouble. This is the reason he feels unloved, and, therefore, hates his mother. Being unloved he feels he must be bad and tries to overcome it by wanting to be perfect. Feeling unloved and bad, since the mother does not love him that the whole world must know how bad he is and is, therefore, against him. In attempting to relationize his being unloved, he attributed it to his Asian physical features, just as another child might attribute it to a crooked nose, short stature, too fat, too skinny, etc. Many a person attempts to cure themselves through plastic surgery, but to no avail.

This type of damage to an infant can be overcome if the mother really gets over the depression in a short time. There will remain scars, but by and large the child will develop normally within reason. The fact that this child has not changed indicates that the mother has been depressed right along and has never really been able to mother him properly although attending to his basic needs. Had he not been endowed with as good intelligence and the high degree of aggression he might have retreated into a shell of his own and become instead an autistic child.

The outlook for this boy is grim unless he is really reached through active psychotherapy over a long period of time and allowed to correct his very early infantile experience in the therapeutic process.

From the Executive Director
J. E. Ballentine

MEDICAL DIGEST

News of Interest to Doctors in Tennessee

SUMMARY OF ACTIONS OF THE AMA HOUSE OF DELEGATES
July 13-17, 1969, New York

AMA HOUSE HAS TUMULTUOUS SESSION . . . Delegates to the AMA Convention and House of Delegates have never been busier than they were at the 118th annual convention in New York, July 13-17 . . . Business presented to the House included 59 reports from the Board of Trustees; the Executive Vice President; Standing and Special Committees; and 137 resolutions . . . In addition to the tremendous amount of work presented to the House, it also suffered a 21 minute interruption during its opening session when 40 dissident radical students and the their bearded friends seized the podium and demanded the right to address the House . . . The demonstrators represented the Student Health Organization. A second incident almost developed on the third day of the House session with a non-negotiable demand submitted which was flatly rejected by the Chairman (Dr. Tom Nesbitt, Nashville) of the Reference Committee on Rules and Order of Business.

* * * * *

ELECTIONS . . . Dr. Walter C. Bornemier, Illinois, named President-Elect . . . One of the most important elections was for the Judicial Council. This had particular interest to Tennesseans since Dr. Charles C. Smeltzer, Knoxville, was re-elected to a 5-year term. Addresses were made by the Vice-President of the United States, Spiro T. Agnew, and Dr. Roger O. Egeberg, Assistant Secretary of HEW for Health and Scientific Affairs, who addressed the House on the rising cost of health care, advances in medical science and the fact that physicians are working long hard hours.

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HOUSE ACTIONS—Osteopaths . . . The House amended AMA's By-Laws to the end that qualified Osteopaths can be admitted to active AMA membership. They must follow the same steps as M.D.'s with their county and state medical associations if osteopaths are accepted. This means that the county medical society and the state medical association still would have to accept and certify osteopath members . . . AMA can achieve greater unity within the medical profession and further strengthen its scientific program by inviting the national medical specialty societies to play a more active and responsible role and giving those societies the privilege of participating in the selection of section delegates to the AMA House . . . MEDICARE & MEDICAID: The House adopted a report listing four action programs: expanded peer review programs by county medical societies to reduce hospital and nursing home care and to expand ambulatory care . . . Eradication by the profession of isolated abuses by physicians . . . Promotion of innovated health service delivery systems for low income communities with emphasis on ambulatory care . . . Programs by local medical societies to preserve quality of care in the face of cost containment measures.

HEALTH INSURANCE . . . Adopted a report urging that state medical associations, county societies and physicians individually direct "unstinting effort" to promote the proposed program of income tax credits for financing health care in order to preserve and strengthen the voluntary system . . . Encouraged the development of prepayment medical insurance programs in which the payment to the physician is based upon the usual, customary or reasonable fee concept. The House also resolved that the AMA and state medical associations undertake new discussions with governmental agencies, insurance companies and hospitals with the objective of achieving substantial reductions in the amount of paper work.

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RE-LICENSURE . . . Recommended that physicians continued competency to provide quality health services be maintained by every practical means available; that a re-licensure program not be considered at this time; that peer group evaluation be continually utilized and improved, that methods of improving the availability and the content of continuing education programs be continually investigated and refined; that additional incentives be positive in nature and come from within the profession . . . On the subject of physicians and hospitals, the House resolved that "the AMA Commissioners to the Joint Committee on Accreditation of Hospitals urge the Joint Commission to insure that the body which carries out the governing function of the medical staff shall be representative of the medical staff and include members of the medical staff . . . On state projects, the House resolved that financial support by the AMA for local or area health service projects should be preceded by consultation with the constituent association of the state or states in which the projects are to be conducted . . . The House also reaffirmed its support of all forms of nursing education including baccalaureate, diploma, associate and practical nurse education programs and encouraged the continuation of federal, state and local subsidies to schools of nursing education. . . .

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SOME OTHER HIGHLIGHTS OF HOUSE ACTIONS . . . Assigned the highest priorities to these areas of activity: (1) rising cost of health care, (2) expansion of out-of-hospital health services, (3) development of community health centers, (4) experimentation and innovation on new methods of delivery of health services, (5) medical audit, utilization and review committees, (6) medical manpower needs, (7) preventive medicine, and (8) family planning . . . Adopted a resolution urging Congress to reassess the intent and priorities of Title XIX, since HEW actions to set rigid limits on medicaid payments to physicians appear to contradict congressional intent that medicaid patients receive care on same basis as private patients . . . The House urged a change in the Medicare law to allow direct admission to patients to extended care facilities when less than acute hospital care is required . . . Referred to the Board of Trustees a resolution reiterating AMA opposition to the extension of Medicare benefits to those under age 65 . . . Condemned chiropractic . . . Approved again the idea that the attending physician should not receive a mark-up on bills from clinical laboratories . . . Removed AMA opposition to federal loans to medical students . . . More than 47,000 attended the convention, including 15,400 physicians. These are by no means all of the many actions taken but include some of the more important highlights.

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(See following yellow pages, this issue, for comment on other actions.)

Public Service

Communications Legislation

Hadley Williams, Public Service Director

AMA TO FURTHER STUDY USE OF CREDIT CARDS . . . Two resolutions were introduced at the July AMA Convention in New York regarding the acceptance of bank credit cards by physicians. The previous opinion of the AMA Judicial Council on this subject was reaffirmed by the AMA House of Delegates and both resolutions were referred to the Council for information with the expectation that additional opinions will be rendered as experience accumulates. The principles regarding credit card payments to physicians were reiterated as follows:

1. The County Medical Society should be satisfied as to the financial and professional integrity of the plan. It should negotiate with the plan sponsors to insure that service charges to the physician are reasonable. It should insist that the plan be open to all physicians on the same terms and that it not exploit or capitalize on physicians' participation in the plan. It should advise the plan that the listing of physicians in directories of participating members is contrary to the ethics of the medical profession.
2. The individual physician may not, because of his participation, increase his fee for medical service rendered the patient. He may not use the plan to solicit patients. He may not encourage patients to use the plan. His position must be that he accepts the plan as a convenience to patients who desire to use it. Plaques or other devices indicating participation in the plan within the physician's office shall be kept to a discreet and dignified minimum. Plaques, signs, or other devices indicating such participation visible outside the physician's office are unacceptable.
3. The use of a bank credit card in connection with the payment of larger fees—which might normally be paid to the physician in installments—is not to be encouraged. All members of the Association are expected to continue the traditional practice of permitting patients of limited means to pay relatively large fees in installments without interest or carrying charges. Out of respect for the dignity and traditions of the medical profession, the physician may not relieve himself of his obligations "to render service to humanity, reward or financial gain being a subordinate consideration."

Dr. Charles C. Smeltzer of Knoxville is a member of the AMA Judicial Council and was re-elected to a second 5-year term by the AMA House during the July meeting in New York.

PEER REVIEW STRONGLY ENDORSED BY AMA HOUSE . . . The AMA House of Delegates strongly endorsed the concept of peer review and urged that state and local county medical societies give the highest priority to the strengthening of existing mechanisms and in those areas where no mechanisms of peer review exists, that they be promptly established. The following statement regarding the subject submitted by the AMA Council on Medical Service and endorsed by the AMA Board of Trustees was adopted by the House as policy:

1. The Council on Medical Service knows of no greater challenge facing the profession today than to secure universal acceptance and application of the peer review concept as the most meaningful method for creating a public awareness of medicine's efforts to assure high quality of health services at a reasonable cost, slowing the rate of escalation in health care charges, stimulating health insurance organizations to make broader protection available to more people, and retaining professional control in patient-physician fiscal and economic relationships.

Attention was also called to the forthcoming Medical Services Conference to be held in Denver November 29, 1969, the day immediately preceding the AMA Clinical Convention, which will be devoted entirely to the subject of peer review.

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RURAL HEALTH CONFERENCE SET . . . The seventh annual Tennessee Rural Health Conference will be held on the campus of East Tennessee State University in Johnson City Wednesday, October 8, 1969. The conference, co-sponsored by TMA, Tennessee Farm Bureau Federation and the University of Tennessee Agricultural Extension Service is expected to attract more than 200 physicians, farm bureau officials, home demonstration club members and extension service personnel. Comprehensive Health Planning and the Impact of Regional Medical Programs on Rural Health are among the topics to be discussed. The immediate past-chairman of the AMA Council on Rural Health, Dr. Ben N. Saltzman of Mountain Home, Arkansas, will participate on the program and will discuss "Models for Delivery of Rural Health Services." Dr. Julian C. Lentz, Jr. of Maryville is chairman of the TMA Rural Health Committee.

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COMPULSORY HEALTH INSURANCE GOAL FOR WALTER REUTHER . . . The president of the United Mine Workers, Walter Reuther, told the press recently that drafting of compulsory health insurance legislation had begun. Reuther is also chairman of the Committee for National Health Insurance and stated that I. S. Falk, Ph.D., professor of public health, Yale School of Medicine was drafting a legislative proposal. His committee will launch a public education campaign to make the compulsory plan an issue in 1970 congressional elections and he predicted the legislation will pass quickly through Congress because the public is tired of high costs of health care. The bill will include financial incentives for prepaid group practice. Reuther said the AMA's income tax credit plan is a "bailing wire and broken shoe string approach" to the problem and he termed health care in America "third rate."

TMA SPECIAL ITEM

Hospitalization of the Mentally Ill in Tennessee

The handbook is designed to provide physicians with essential information regarding:* (1) *hospitalization of the patient in need of treatment in a mental hospital or in an available facility for outpatient services;* (2) *information that will facilitate the admission of patients when the need for hospitalization, evaluation or outpatient treatment is found;* (3) *enumeration of safeguards for the physician and the patient;* (4) *items of special information that may be useful for the physician who is not familiar with the mechanisms of transportation of patients, separation of medical and legal issues, transfers and discharges of patients and others.* (After publication and distribution of the handbook, there will undoubtedly occur omissions and desirable changes which can be incorporated in later revisions. Changes in the mental health law will occur from time to time, which should be included in such revisions.)

Introduction

The Mental Health Committee of the Tennessee Medical Association has been authorized by the House of Delegates of the T.M.A. to prepare a concise review of the laws of Tennessee which pertain to the care and management of the mentally ill.

A new mental health law was passed by the 1965 legislature following an intensive study of existing mental health laws. This law (designated as Chapter 38 of the Public Acts of 1965-Tennessee Code Annotated, Sections 33-301 and 33-701 inclusive) relating to all aspects of the problem under the guidance of the Tennessee Department of Mental Health was passed with substantial support from the T.M.A., the County Judges' Association, the Tennessee Mental Health Association, and a number of other agencies having interest and involvement in the mental health of the individual.

An additional law (Chapter 157 of the Public Acts of 1965-Tennessee Code Annotated, Section 24-112), involving privileged communication, was passed. This law provides that: Communications between a patient and a person licensed to practice medicine while acting in the capacity of a psychiatrist shall be privileged communications except in civil and criminal cases and other legal proceedings in which (1) the mental condition of the patient is an issue or (2) it is determined by the court or board having jurisdiction of the matter that the interests of justice require that the privilege be withheld.

The new mental health law provided the following notable changes:

(1) A complete revision of the antiquated county quota system with the provision that treatment of all state mental hospital patients is the responsibility of the state rather than the county. This would allow the counties to exert greater effort in management of local problems.

(2) The separation of the issue of competency from the legal process of hospitalization (an adjudication of incompetency is now an entirely separate legal procedure).

(3) The provision of a mechanism by which a patient who is a danger to himself or to others may be admitted immediately to a mental hospital with a minimum of difficulty (see commentary on Emergency Admission, page 17).

(4) Modification of provisions for voluntary admission (Page 15).

(5) A provision for non-contested admission by which a person might not seek admission to a psychiatric hospital but would not object if urged by a member of his family or by his physician.

Under the new law, it is not necessary to prove that a patient is incompetent in order to hospitalize him. It is to be noted that at the time of judicial hospitalization the court shall hear and consider evidence bearing on the competency of the individual to manage himself and his estate. This question shall be decided separately and apart from the question of his mental illness.

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*This manuscript was jointly prepared by the TMA Committee on Mental Health and the Tennessee Department of Mental Health. Dr. Frank Luton, as Assistant Commissioner of the Department of Mental Health and Chairman of the TMA committee, was the primary author of the document, which will soon be prepared as a pocket handbook and distributed to the TMA membership.

Immunity from Liability

Sec. 33-304, par. C—Tennessee Code Annotated

> "All persons acting in good faith reasonably and without negligence in connection with the preparation of petitions, applications, certificates or other documents or the apprehension, detention, discharge, examination, transportation, or treatment of an individual under the provisions of Chapter 3-6, inclusive, of this Title and Section 33-701 shall be free from all liability, civil or criminal by reason of such acts."

Certificate by Physicians

Section 33-605—Tennessee Code Annotated

> "No certificate may be considered if made by a physician who is related by blood or marriage to the third degree to the individual who is the subject of the petition or who has a direct financial interest in any private hospital in which the individual is to be detained or, except in the case of a physician employed by the State of Tennessee, who is professionally or officially connected with such hospital."

Special Information

The physician should never sign an admission certificate or hospitalization paper unless he has examined the patient within a period of three days prior to his signing the paper. He is subject to prosecution if he does not comply with this requirement.

(1) Admission must always be accompanied by a brief statement or letter containing the essential facts concerning the patient's behavior necessitating admission to a mental hospital. The statement should include, in addition to a description of his behavior, information regarding any concurrent condition which requires management and any concurrent treatment. (Provided for by Sections 33-311 and 33-604 Tennessee Code Annotated)

(2) Prior to the time of admission or before the individual is taken out of the county, whichever is earlier, the county judge or chairman, or his designated representative, shall be notified by phone, telegraph, or in person.

(3) When a patient over age 65 is being considered for admission, the physician should call the Superintendent or Clinical Director of the state mental hospital for discussion of the problem.

(4) Physician should notify the relatives of patients to be admitted to a mental hospital that the patient should arrive before 3:00 p.m. Admissions at night and weekends will be restricted to absolute emergencies.

Rights of Patients

There is statutory protection of the civil rights of the patient. The law explicitly requires humane care, protects the right of visitation and communication, limits the use of mechanical restraints, respects the confidentiality of patient records, preserves the right of habeas corpus, guards the patient's right to his property, to vote, execute instruments, make purchases, and enter into contractual relationships—unless the patient has been adjudicated incompetent by a court of competent jurisdiction, and has not been restored to legal capacity.

There is also statutory provision for periodic examination of patient's hospitalization under provisions of the mental health law. The law also forbids the use of jails for the detention of mental patients except in emergency situations.

Psychiatric Facilities in Tennessee

(1) Mentally ill patients in Tennessee who are in need of hospitalization may be treated in private psychiatric hospitals, general hospitals with psychiatric services, and by the facilities of the Tennessee Department of Mental Health.

(2) Persons with criminal charges when considered to have some mental illness (psychosis) that might interfere with their competency to stand trial or to advise with counsel in the development of their defense, are sent to the Central State Psychiatric Hospital for evaluation and treatment if indicated. Males are admitted to a separate maximum security division and females are admitted to the other part of the hospital.

(3) The trend has been to admit an increasing number of patients to all hospitals and facilities for treatment of the mentally ill. However, due to improvements in techniques of treatment and availability of outpatient services, the discharge rate is also rising. Distinct success in treatment and rehabilitation is a reality and revison of our mental health laws has made admission to a mental hospital much more acceptable to patients and families. In view of these and other factors, mutual and private insurance companies have included coverage for mental illness in their policies. This creates the expectation that there will be an

expanding need for psychiatric facilities and personnel.

A list of psychiatric facilities that are currently available in Tennessee follows:

Private Psychiatric Hospitals and Services

Gartley-Ramsay Hospital
Memphis, Tennessee
R. G. Ramsay, Administrator
901-526-7477

Madison Sanitarium
Madison, Tennessee
Admission Office
865-2373

Turner Sanitarium
Memphis, Tennessee
Justin Adler, M.D., Director
901-386-4712

General Hospitals with Psychiatric Services

City of Memphis Hospitals
Memphis, Tennessee
G. H. Aivazian, M.D., Chief of Service
901-527-5431

Baptist Memorial Hospital
Memphis, Tennessee
Chief of Psychiatry Staff
901-525-4111

Vanderbilt University Hospital
Nashville, Tennessee
Adults 17 beds
William F. Orr, M.D., Director
254-5411

Meharry Hospital
Nashville, Tennessee
Jeanne Spurlock, M.D., Director
256-3631

Erlanger Hospital
Chattanooga, Tennessee
Harold Peterson, Administrator
755-7011

U. T. Memorial Hospital
Knoxville, Tennessee
George Gee, M.D., Chief of Service
546-4511

Bristol Memorial Hospital
Bristol, Tennessee
W. W. Fanning, Director
703-968-1121

Kingsport-Holston Valley
Community Hospital
Kingsport, Tennessee
William A. Phillips, Director
247-2111

Tennessee Department of Mental Health Hospitals and Schools

Arlington Hospital and School
Arlington, Tennessee
James Brown, M.D., Superintendent
901-867-2921

Clover Bottom Hospital and School
Donelson, Tennessee
Ronald L. Thiele, M.D., Superintendent
741-4573

Greene Valley Hospital and School
Greeneville, Tennessee
James Willett, M.D., Superintendent
839-1161

Special Facilities

Child Development Center
Memphis, Tennessee
Robert G. Jordan, M.D., Director
901-272-7455

Senior Citizens, Inc.
Nashville, Tennessee
Sebastian Tine, M.S.W., Director
244-5360

Wills Children's Psychiatric Center (Vanderbilt)
Nashville, Tennessee
William F. Orr, M.D., Director
254-5411

Cumberland House Re-ed Center
Nashville, Tennessee
Nelle D. Wheeler, M.A., Principal
741-3271

Moccasin Bend Children's Unit (Re-ed Center)
Chattanooga, Tennessee
Louis P. Semrau, Jr., M.A., Principal
265-2271

Tennessee Psychiatric Hospital
Children's Unit (Re-ed Center)
Memphis, Tennessee
Neal Carmack Buchanan, Principal
901-525-8211

Pine Breeze (Adolescent Re-ed Center)
Chattanooga, Tennessee
G. Ronald Neufeld, Principal

Veterans Administration Hospitals

Veterans Administration Hospital
Memphis, Tennessee
Roy M. Barber, M.D., Director
901-278-5110

Veterans Administration Hospital
Nashville, Tennessee
Charles Wells, M.D., Chief of Service
297-0971

Veterans Administration Hospital
Murfreesboro, Tennessee
Ernest Fogel, M.D., Director
W. H. Tanksley, M.D.
Chief of Outpatient Department
893-1360

Mountain Home
Johnson City, Tennessee
Clarence M. Creech, M.D., Director
928-0281

Veterans Administration
Outpatient Department
Knoxville, Tennessee
Othmas S. Fuchs, M.D., Director
524-4011

Tennessee Department of Mental Health Hospitals

Central State Psychiatric Hospital
Nashville, Tennessee
William H. Tragle, M.D., Superintendent
741-7522

Eastern State Psychiatric Hospital
Knoxville, Tennessee
Cecil F. Mynatt, M.D., Superintendent
584-1561

Moccasin Bend Psychiatric Hospital
Chattanooga, Tennessee
Garrison Geller, M.D., Superintendent
265-2271

Tennessee Psychiatric Hospital and Institute
Memphis, Tennessee
James A. Wallace, M.D., Superintendent
901-525-8211

Western State Psychiatric Hospital
Bolivar, Tennessee
James H. Druff, M.D., Superintendent
901-658-5141

Special Counseling Services

Child & Family Service
Knoxville, Tennessee
524-7483

Family and Children's Service
201-23rd Avenue, North
Nashville, Tennessee 291-2700

East Tennessee Marriage & Family
Life Counseling Service
Johnson City, Tennessee
926-1112 Ext. 372

Mental Health Centers

East Tennessee

Bristol Mental Health Center
Bristol, Tennessee
Imran Hatiboglu, M.D., Director
703-669-7551

Bristol Memorial Hospital
Community Mental Health Center
Bristol, Tennessee
W. W. Fanning, Director

Chattanooga Psychiatric Center
Chattanooga, Tennessee
Robert B. Hagood, M.D., Director
267-4408

Johnson City Mental Health Center
Johnson City, Tennessee
Robert G. Owens, ACSW, Director
928-7311

Kingsport Mental Health Center
Kingsport, Tennessee
Harlan White, M.S.W., Acting Director
247-5123

Helen Ross McNabb Mental Health Center
Knoxville, Tennessee
Kenneth Carpenter, M.D., Director
524-3671

McMinn Mental Health Center
Athens, Tennessee
Carl T. Moore, M.S.W., Director
745-8802

Mental Health Center of Anderson & Roane Counties, Inc.
Oak Ridge, Tennessee
John F. Byrne, Ph.D., Director
482-1076

Morristown Mental Health Center
Morristown, Tennessee
John H. Wolaver, M.D., Director
586-5031

Middle Tennessee

Giles County Mental Health Center
Pulaski, Tennessee
James F. Cooper, M.S.
Executive Director
363-5438

Harriett Cohn Mental Health Center
Clarksville, Tennessee
William C. Greer, M.D., Director
645-5688

Maury County Mental Health Clinic
Columbia, Tennessee
D. R. W. Shupe, M.D., Director
388-6653

Meharry Mental Health Center
Nashville, Tennessee
Harold W. Jordan, M.D., Acting Director
256-3631

Multicounty Mental Health Center
Tullahoma, Tennessee
John Carver, M.D., Director
455-3476

Nashville Mental Health Center
Nashville, Tennessee
Maurice Hyman, M.D., Director
297-9571

Neighborhood Counseling Center (Branch of Nashville Mental Health Center)
Nashville, Tennessee
Robert F. Stepbach, Ed.D., Director
297-6487

Plateau Mental Health Center
Cookeville, Tennessee
Robert V. Larrick, M.D., Director
526-6139

Rutherford County Mental Health Center
Murfreesboro, Tennessee
Francis Deter, M.D., Director

Vanderbilt Mental Health Center
Nashville, Tennessee
Robert W. Adams, Jr., M.D., Director
254-5411

West Tennessee

Gailor Mental Health Center
Memphis, Tennessee
William W. Walker, Jr., M.D., Director
901-527-5431

Jackson Mental Health Center
Jackson, Tennessee
Richard Drewery, Ph.D., Acting Director
901-427-6771

Memphis-Shelby County Mental Health Center
Memphis, Tennessee
Richard G. Cain, Administrative Director
901-327-1651

Northwest Mental Health Center
Union City, Tennessee
Richard G. Farmer, M.D., Director
901-885-9333

More detailed information about the various types of admission follows.

Voluntary Admission

Any individual 18 or older may apply to a hospital as a voluntary patient for purposes of observation, diagnosis, care and treatment of a mental illness. For those under 18, the request must be made by spouse, parent or legal guardian.

If examination by an admitting psychiatrist in a state hospital indicates need for hospitalization, and if *space is available,* he *shall be admitted.*

(The superintendent of a private hospital may admit such an applicant.)

Any volunteer patient 18 or over may obtain his release by filing a written request with the superintendent. The superintendent shall within 48 hours after receipt of the request release the patient unless the 48 hour period expires on a Saturday, Sunday, or legal holiday. In that case the patient must be released not later than noon of the next succeeding day. The parent, spouse or guardian must file such an application for patients under 18.

Patient's Request (18 and Over)
Spouse, Parent, Guardian Request (Under 18)
No Physician Certificate

Pre-Admission Examination
By Staff Physician at Mental Hospital

Hospitalization Period Indefinite
May Request Release at any Time

By Filing Written Request
With Superintendent
By Patient, 18 or Over
By Spouse, Parent, Guardian, Under 18

Release Within 48 Hours
Unless Time Expires
on Saturday, Sunday, Legal Holiday

Emergency Admission

Any state, county or municipal officer authorized to make arrests, or any licensed physician who has reason to believe an individual is mentally ill and likely to injure himself or others unless he is immediately detained, may take such an individual into custody without a warrant.

If he is taken into custody by anyone other than a licensed physician, he must be taken to the nearest available licensed physician for examination. If the physician feels immediate hospitalization is required to protect the individual or the public, he may certify that such hospitalization is required and the person may be transported to the nearest state psychiatric hospital (or to a private hospital) for admission.

If the state hospital is outside the county where the person is taken into custody, the officer or the physician must obtain authority from the county judge or his representative to transport him from the county.

When considering the case, the judge may (1) order immediate release, (2) order that

he may be held without treatment in a hospital pending formal hearing, or (3) authorize transporting the patient to a state psychiatric hospital.

When the individual arrives at the state psychiatric hospital, he shall be examined by the admitting physician and detained, provided the physician concurs that an emergency situation exists.

No person admitted under emergency conditions shall be detained in a hospital for more than three days (with the weekend and holiday exception) unless the superintendent within the three-day period has filed a written petition with the county judge or county chairman in which the hospital is located for an order authorizing continued observation not exceeding 14 days. The court may order such continued observation or immediate release. If continued observation is indicated after the 14-day period, the superintendent must request hospitalization proceedings.

Law Enforcement Officers or Physicians May Take into Custody Without Warrant

One Physician Certificate Plus Judicial Authority to Transport Patient Out of County

Pre-Admission Examination By Staff Physician at Mental Hospital

Automatic Release Within 3 Days from Admission Unless Time Expires Saturday, Sunday, or Legal Holiday or Unless Superintendent Initiates Judicial Detention Order

Admission on Request of Friend, Relative or Guardian

A friend, relative or guardian of an individual believed to be suffering from a mental illness, or, if the individual is in any institution, the head of such institution, may apply on behalf of that individual to a state psychiatric hospital for admission. Noncontested admission applications must carry the signature both of the patient and the person making the application in his behalf stating that the patient does not object to hospitalization.

Such an application must be accompanied by the certificates of two licensed physicians, only one of whom may be an employee of the admitting hospital, that they have examined the individual within three days prior to the date of the certificate and are of the opinion that he is mentally ill and in need of care and treatment in a psychiatric hospital.

The superintendent of the state hospital shall admit the patient if suitable accommodations are available, but may refuse admission, however, if after examination by a member of his staff, hospitalization in a state psychiatric facility is not indicated.

A person hospitalized under these conditions is eligible for release on his own written request or that of his spouse, parent, guardian or adult next of kin if he is under 18. Release must take place within 72 hours after the request (with the weekend and holiday exception), unless the superintendent will initiate legal procedures with the judge or chairman of the county court to have the patient judicially hospitalized.

Written Application by Friend, Relative, or Guardian Plus Patient's Signature Plus Two-Physician Certificate

Pre-Admission Examination By Staff Physician at Mental Hospital

Hospitalization Period Indefinite Unless Patient Requests Release

By Filing Written Request With Superintendent

Release Within 72 Hours Unless Time Expires Saturday, Sunday, or Legal Holiday or Unless Superintendent Initiates Judicial Procedures

Judicial Hospitalization

Proceedings for the judicial hospitalization of an individual may be commenced by the filing of a petition with the judge or chairman of the county court or probate court where the individual lives. The petition may be filed by the parent, guardian, spouse or a responsible adult relative or by any licensed physician, health or welfare officer or head of any institution in which the individual might be, or by any officer authorized to make arrests in Tennessee.

Forms for such a petition are available in the offices of the county judge or chairman of the county court or at a state psychiatric hospital. The forms include spaces for the certification of two licensed physicians. The certification may be made jointy or separately and may be based on examination conducted jointly or separately. The examination must have been made within three days of the date of the certificate.

If an individual refuses to submit to examination by a physician, the petition shall be accompanied by a sworn, written statement by the petitioner that he has good reason to believe the individual is mentally ill and in need of care and treatment in a mental hospital and that he has refused to submit to the required examination by a physician.

When a petition is received by the court, it shall give notice of the petition and of the time and place of hearing by registered mail to the individual and others directly concerned. The person must be given an opportunity to appear and the judge may require his appearance.

At least one of the witnesses at the hearing must be a licensed physician who has examined or attempted to examine the individual within 20 days prior to the hearing. The physician may give his testimony by deposition or affidavit, however, with the consent of the individual or his counsel.

If, after the required hearing, the court finds the individual mentally ill, he may be hospitalized to a state psychiatric hospital for an indeterminate period or for a temporary period not exceeding six months for observation, diagnosis, and treatment.

It is to be emphasized that at the time of judicial hospitalization, the court shall hear and consider evidence bearing on the competency of the individual to manage himself and his estate. This question shall be decided separately and apart from the question of his mental illness.

Petition to Court
Plus
Certificate from Two Physicians

Court Hearing with Dismissal
or
Temporary Hospitalization
Maximum Six Months
or
Hospitalization for Indefinite Period

Court Hearing Bearing on
Competency to Manage
His Own Affairs

Retardate Admissions

The superintendent of any hospital and school for the mentally retarded, subject to the *availability of suitable accommodations,* is authorized to admit for diagnosis, care, training, and treatment any mentally retarded individual whose admission is applied for under any of the following procedures:

Application to the superintendent of a state hospital and school for retarded must be made by: (1) a parent, guardian, or legal custodian of a minor, or by the guardian of a mentally retarded adult, or by the mentally retarded adult on his own behalf, or

(2) the spouse, adult child or close adult relative; or by health or welfare officer, or school official, with the consent of the individual or his parent, guardian or legal custodian, accompanied by a certificate of a licensed physician or a licensed physician and a licensed psychologist that he has examined the person within 30 days and is of the opinion the individual is mentally retarded and in need of care and treament in a hospital and school, or

(3) if the individual, his parent, guardian or legal custodian does not consent to an application, such an application may be filed by any interested responsible adult in the county court.

When application is filed with any court for hospitalization of any mentally retarded individual, the judge or chairman of that court shall appoint two licensed physicians or one licensed physician and one licensed psychologist to examine the individual and certify their findings to the court within three days.

Procedures in essence are those prescribed for judicial hospitalization of the mentally ill.

Admissions to Maximum Security Unit

Procedures here are essentially the same as for judicial hospitalization except that the petition is filed with the court of criminal jurisdiction.

This unit is for holding in custody and caring for persons held under other than civil process, either for care and treatment for mental illness or for evaluation, observation, and diagnosis for determining presence or absence of mental illness.

Alcoholics

Admission to state facilities for alcoholism is voluntary only and court proceedings are not applicable.

State psychiatric hospitals operate detoxification units for alcoholics on a space available basis only.

The law does provide for the hospitalization of alcoholics to city, county, charitable, or private institutions under the present law with the consent of the head of the privately operated facility concerned.

Addiction to stimulant or sedative drugs is handled in the same manner as addiction to alcohol.

Facilities for Alcoholics

Alcoholic Detoxification Unit & Rehabilitation Unit
Central State Psychiatric Hospital
Nashville, Tennessee
Gerd Schroeder, M.D.
741-7412

Alcoholic Detoxification Unit & Rehabilitation Unit
Eastern State Psychiatric Hospital
Knoxville, Tennessee
Cecil F. Mynatt, M.D., Superintendent
584-1561

Alcoholic Detoxification Unit
Moccasin Bend Psychiatric Hospital
Chattanooga, Tennessee
Garrison Geller, M.D., Superintendent
265-2271

Alcoholic Rehabilitation Unit
Tennessee Psychiatric Hospital and Institute
Memphis, Tennessee
David H. Knott, M.D., Director
901-525-8211

Alcoholics Anonymous
Knoxville, Tennessee
522-9457

Alcoholics Anonymous
Memphis, Tennessee
901-526-8738

Alcoholics Anonymous
Nashville, Tennessee
269-5757 or 254-8041

Chattanooga Area Council on Alcoholism
Chattanooga, Tennessee
Pat Hatfield, Executive Director
267-3354

Baroness Erlanger Hospital
Chattanooga, Tennessee
Harold Peterson, Director
755-7011

Bristol Alcoholics Anonymous
Bristol, Tennessee
703-764-6196

Bristol Memorial Hospital
Bristol, Tennessee
W. W. Fanning, Administrator
703-968-1121

Bristol Mental Health Center
Bristol, Tennessee
Imran Hatiboglu, M.D., Director
703-669-7551

Carter County Memorial Hospital
Elizabethton, Tennessee
Vance C. Holland, Administrator
543-3151

Cumberland Heights (men only)
Nashville, Tennessee
352-1757

Downtown Fellowship Center
Chattanooga, Tennessee
266-2660

Fentress County Hospital
Jamestown, Tennessee
Jack Smith, M.D.
879-8167

Flynn House
Knoxville, Tennessee
525-1224

FREH Clinic
Madison, Tennessee
Julian Gant, M.D., Director
865-0315

Greeneville Alcoholics Anonymous
Greeneville, Tennessee
234-4348

Harbor House
Memphis, Tennessee
Berton Davis, Executive Director
901-276-3115

Helen Ross McNabb Center
Knoxville, Tennessee
Kenneth Carpenter, M.D., Director
524-3671

Holston Valley Community Hospital
Kingsport, Tennessee
William A. Phillips, Director
247-2111

Hubbard Hospital
Nashville, Tennessee
256-3631

Jackson Area Council on Alcoholism, Inc.
Jackson, Tennessee
Bob Aspell, Executive Director
901-424-9441

Johnson City/Elizabethton
Alcoholics Anonymous
928-7583

Johnson City Mental Health Center
Johnson City, Tennessee
G. Robert Owens, Director
928-7311

Kingsport Alcoholics Anonymous
Kingsport, Tennessee
247-7205

Kingsport Council on Alcoholism
Kingsport, Tennessee
John W. Ross, Executive Director
245-7281

Kingsport Mental Health Center
Kingsport, Tennessee
Dennis Chipman, M.D., Director
247-5123

Kingsport Serenity Alcoholics Anonymous Group
Kingsport, Tennessee
245-7552

Marillac Manor (women only)
(Must be sober on admission)
Nashville, Tennessee
Mrs. Susan Edwards, Director
298-2933

Meharry Psychiatric Department
Nashville, Tennessee
Jeanne Spurlock, M.D., Chairman
256-3631

Memphis Union Mission
Memphis, Tennessee
Jimmy Stroud, Superintendent
901-276-3115

Metro General Hospital (Emergency Admission)
Nashville, Tennessee
255-6311

Mountain Home Alcoholics Anonymous
Box 202
Johnson City, Tennessee

Munal Clinic
Kingsport, Tennessee
Martin E. Nitschke, Administrator
245-7281

Nashville Mental Health Center
Nashville, Tennessee
Maurice Hyman, M.D., Director
297-9571

Nashville Union Mission
(men only)
Nashville, Tennessee
Jim Funderburks, Director
255-2475

National Council on Alcoholism, Memphis Area
Memphis, Tennessee
Harwin M. Hunsley, Executive Director
901-525-2302

National Council on Alcoholism,
Middle Tennessee Area
Nashville, Tennessee
Grimes Manning, Director
254-6547

Salvation Army Social Service Center
(men only)
Nashville, Tennessee
255-0643

Salvation Army Transient Lodge
(Men and women)
Nashville, Tennessee
242-5409

Samaritan House (men only)
Nashville, Tennessee
Mr. Roque Fajardo, Director
244-4802

S.T.A.R. House
Chattanooga, Tennessee

Takoma Hospital
Greeneville, Tennessee
John McClellan, Administrator
638-4117

Unicoi County Memorial Hospital
Erwin, Tennessee
742-2061

Vanderbilt Hospital
(Emergency Admission)
Nashville, Tennessee
254-5411

Discharge—Re-Hospitalization

A conditional discharge for an improved patient may be granted, including provisions for continuing responsibility to and by the hospital. This includes a plan of treatment on an out-patient basis or under direction of a licensed physician, to whom the patient may have been referred by the hospital.

At any time prior to an absolute discharge, the patient may be re-admitted or in the case of judicial hospitalization, may be required to return to hospitalization by court order.

The following is a list of counties served by Central State Psychiatric Hospital, Clover Bottom Hospital and School, and Cumberland House (Re-ed Center):

Bedford
Cannon
Cheatham
Clay
Coffee
Davidson
DeKalb
Dickson
Franklin
Giles
Hickman
Houston
Humphreys
Jackson
Lawrence
Lewis
Lincoln
Macon
Marshall
Maury
Montgomery
Moore
Overton
Perry
Putnam
Robertson
Rutherford
Smith
Stewart
Sumner
Trousdale
Van Buren
Warren
Wayne
White
Williamson
Wilson

The following is a list of counties served by Eastern State Psychiatric Hospital and Greene Valley Hospital and School:

Anderson
Bledsoe
Blount
Bradley
Carter
Campbell
Claiborne
Cocke
Cumberland
Fentress
Grainger
Greene
Grundy
Hamblen
Hamilton
Hancock
Hawkins
Jefferson
Johnson
Knox
Loudon
Marion
McMinn
Meigs
Monroe
Morgan
Pickett
Polk
Rhea
Roane
Scott
Sequatchie
Sevier
Sullivan
Unicoi
Union
Washington

The following is a list of counties served by Moccasin Bend Psychiatric Hospital:

Bledsoe
Bradley
Coffee
Cumberland
Franklin
Grundy
Hamilton
Lincoln
Marion
McMinn
Meigs
Monroe
Moore
Polk
Rhea
Sequatchie
Van Buren
White

The following is a list of counties served by Western State Psychiatric Hospital, Arlington Hospital and School, and Tennessee Psychiatric Hospital and Institute Children's Unit:

Benton
Carroll
Chester
Crockett
Decatur
Dyer
Fayette
Gibson
Haywood
Hardeman
Hardin
Henderson
Henry
Lake
Lauderdale
Madison
McNairy
Obion
Shelby
Tipton
Weakley

The following are counties served by Tennessee Psychiatric Hospital and Institute (except for children's unit):

Shelby
Tipton

President's Page



FRANCIS H. COLE

The long hot summer is upon us and the general tempo of activities is a little less than during the rest of the year with vacationers too occupied in their fishing expeditions, swimming trips and sunburn remedies to be as diligent as usual in their productive activities. Our summer has been unsettled in Memphis by the labor dispute which threatened to disrupt the City Hospitals as well as the West Tennessee Chest Disease Hospital, but we can now hope for several years of harmonious relationships between the hospital administration and its employees.

The University and its physical plant becomes more impressive with each passing year as the building program continues. The faculty is taking steps to provide an uninterrupted flow of clinical material under the varying circumstances of Medicare and Medicaid reimbursement. The private practitioners have been deluged with a veritable blizzard of directives from the Department of Health, Education, and Welfare. These directives are supposed to substantially reduce the cost of the Federal programs, but they can be expected to fail since the professional fees which they are attempting to limit account for so small a percentage of the total cost of the programs.

There is a bipartisan anxiety in the national Congress over the costs of these programs. There is the absolute certainty in the medical profession that these costs are bound to increase as the programs expand, as more people become eligible, and as the cost of living increases. It might be possible in consideration of these facts to persuade the Federal government to take a new look at these programs and to totally revise its health care emphasis along the lines of supplementary assistance rather than total support, as has been suggested from time to time by individual physicians as well as by the American Medical Association.

Congressman Richard Fulton of Nashville has presented such a bill to the House of Representatives and to date there has been no other sign of any activity in behalf of this proposal. A simplified method of insurance provision for health care costs of all people regardless of age and related to need would be a tremendous relief to harried administrators and to irritated physicians, as well as helping to preserve the traditional right of United States citizens to make their decisions on an individual basis.

Sincerely,

Francis H. Cole, M.D.

President

THE JOURNAL

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AUGUST, 1969

EDITORIAL

ACUTE PHYSICAL DISEASE AND THE MENTAL HOSPITAL

Several years ago the TMA supported legislation which modernized the hospitalization of the mentally ill in Tennessee. Modernization of the care of these patients partakes of the national and worldwide trend permitted by the psychopharmacologic drugs of converting the old "insane asylums" providing custodial care to psychiatric hospitals with an anticipated and now confirmed higher rate of discharge and a lowering rate of readmissions. The latter is dependent upon either local mental health clinics or upon private practitioners who have as an enlightened interest in caring for the mentally ill as for those having physical disease.

This issue of the JOURNAL contains the copy of a handbook on "Hospitalization of the Mentally Ill in Tennessee" to be published and mailed shortly by TMA. Your Editor believes this offers the opportunity to make appropriate remarks concerning the selection of certain patients to be admitted to Tennessee's mental hospitals. The booklet states that under the new law "it is not necessary to prove that a patient is incompetent in order to hospitalize him." The law provides too that an officer or physician who "believe an individual is mentally ill and likely to injure himself or others, unless he is immediately detained, may take such an individual into custody without a warrant." It provides further that if a person is taken into custody by anyone other than a physician, the person must be taken to the nearest doctor for examination who, if he "feels immediate hospitalization is required to protect the individual or the public" certifies to the need for hospitalization. The law thus tends to categorize most instances of mental illness as medical problems rather than judicial ones which is consonant with today's thinking. This makes impossible, without subsequent judicial action, the "losing" of a patient for years in a custodial environment. This is all to the good.

However, this editorial comment is pointed to the misuse of the mental hospital by a few physicians either from misconceptions or, we believe less frequently, from trickery. Misconception if he believes the mental hospital to be equipped with all the facilities and general staff equal to his community or city hospital. Trickery if the doctor presumes to get rid of an unsavory patient by sending him to a mental hospital. He labors under a misconception if he assumes that one in acute intoxication, whether from alcohol or a barbiturate or other drug, can be managed as well in a mental institution as in a general hospital. Or, what of the care of the patient who has been injured and develops a subdural hemorrhage or of the patient suspected of having a brain tumor? It is a misconception if the referring doctor anticipates that the patient can be managed as well in a mental hospital as in a general hospital where a neurosurgeon may be on call.

Your Editor has been medical consultant to Central State Psychiatric Hospital for three decades. He has spent some hours daily in this hospital over the past three

years. He has been faced with the problems cited above on numbers of occasions.

Acute alcoholism and delirium tremens are the most frequent acute medical problems which ideally require care on an "acute" service. Serious drug, especially barbiturate, intoxication becomes an acute emergency upon the development of withdrawal symptoms. Diabetes mellitus, either from acidosis or insulin hypoglycemia, has been the reason for admission upon occasion. Our laboratory is not equipped to offer the support for adequate fluid and electrolyte management. Equally worrisome, and at times even more so, are patients who enter pretty well battered by fisticuffs or kicks, or by clubs or other weapon, with the evidence of contusions and lacerations, sometimes extensive. Though an x-ray is available at Central State Psychiatric Hospital to search for skull fractures, I am not the best one to "read" such films! (Our radiologic consultant is not on the grounds to help us, and films must be sent to him in town for advice.)

The booklet will state that, "The superintendent of the state hospital . . . may refuse admission, if . . . hospitalization in a state psychiatric facility is not indicated." This provision must be invoked at times to meet some of the exigencies mentioned, though at other times the patients arrive so ill that death seeming imminent they are admitted.

If some reader wonders why these hospitals of the State of Tennessee are not able to meet the acute, medical or surgical problems as referred by practitioners and/or city hospitals, it will be well to recall that the legislative budget permits an $8 to 10.00 per diem for patient care in the mental hospitals to be compared to the $55-100.00 per diem per day costs for Nashville's general hospitals, or even the $30.00 per diem charged by extended care hospitals in this city.

The excuse for sending some of these "acute" patients to a state mental hospital is cloaked in the description of a patient "who is a danger to himself or to others" as one who may be admitted to a mental hospital. To use this as a reason to send a combative person under the influence of alcohol or a battered person who came out of an altercation bruised and confused to a mental hospital may represent merely an excuse for disposing of a "problem."

Every medical graduate knows that physical disease may have its mental manifestations. Here I speak for the *acute* medical and surgical problems and not the *chronic* organic diseases which are not uncommon among our patients and which we can "work out" and treat at leisure. It would be well for the referring physician, as he sends a patient with an acute physical condition to a state mental hospital to ask himself: Are the diagnostic and therapeutic treatment facilities available to manage adequately drug intoxication (alcohol, sedative or opiate), diabetic acidosis, hepatic failure or other metabolic disease, or for the injured person with the possibility of skull fracture, subdural hemorrhage or internal injuries—renal or splenic, etc.? The provision of good and adequate medical care demands that these questions be answered in the mind of the physician who is responsible under the circumstances before a patient is referred to a state mental hospital for an acute "mental break" which might have a physical basis.

R.H.K.

IN MEMORIAM

Bowers, Ralph F., Memphis. Died June 25, 1969, Age 69. Graduate of Johns Hopkins University School of Medicine, 1925. Member of Memphis-Shelby County Medical Society.

Thomas, Philip C. Knoxville. Died June 26, 1969, Age 66. Graduate of Vanderbilt University School of Medicine, 1929. Member of Knoxville Academy of Medicine.

PROGRAMS AND NEWS OF MEDICAL SOCIETIES

Knoxville Academy of Medicine

The scientific program for the meeting of the Academy on July 8th consisted of a panel discussion on the subject "Physician-Pharmacist Relationships." Mr. Edward Martin, President of the Knoxville Area Association of Retail Druggists, moderated the panel composed of other pharmacists.

TENNESSEE VALLEY MEDICAL ASSEMBLY

(Sponsored by the Chattanooga and Hamilton County Medical Society, Inc.)

MEMORIAL AUDITORIUM, CHATTANOOGA TENNESSEE

Monday, October 13, and Tuesday, October 14, 1969

17TH ANNUAL ASSEMBLY

Monday, October 13, 1969

7:30 REGISTRATION BEGINS

9:00 ALTON OCHSNER, M.D., President, Alton Ochsner Medical Fdn., New Orleans, La., *"The Present Status of the Treatment of Cancer of the Lung"*

9:30 N. C. HIGHTOWER, M.D., Dir. Scott-White Mem. Hospital, Temple, Texas, *"Esophageal Motor Disorders of Clinical Importance"*

10:00-10:30 INTERMISSION—REVIEW EXHIBITS

10:30 DANIEL W. ELLIOTT, M.D., Clin. Prof. of Surg., Univ. of Pittsburgh, Pittsburgh, Pa., *"New Methods in the Diagnosis of Pancreatic Disease"*

11:00 NORMAN E. LEVAN, M.D., Prof. of Medicine, Chrmn., Sect. of Dermatology, Univ. of So. Calif., Los Angeles, Calif., *"Cutaneous Manifestations of (or Clues to) Diabetes Mellitus"*

11:30 L. W. DIGGS, M.D., Goodman Prof. of Medicine, Univ. of Tennessee, Memphis, Tenn., *"Practical Points in the Diagnosis of Hemorrhagic Disease"*

NOON Luncheon Symposiums—$4.00
(Limited to 85 physicians per symposium)
(Tickets must be obtained prior to assembly)

Symposium No. 1 "SOME ASPECTS OF OPERABLE CANCER"
Guest Panelists: G. A. HALLENBECK, M.D.
ALTON OCHSNER, M.D.
Moderator: FRANK B. GRAHAM, M.D.

Symposium No. 2 "HEART DISEASE, PAST, PRESENT AND FUTURE"
Guest Panelists: PAUL DUDLEY WHITE, M.D.
HELEN B. TAUSSIG, M.D.
SOL SHERRY, M.D.
Moderator: DAVID P. MCCALLIE, M.D.

2:00 G. A. HALLENBECK, M.D., Dept. of Surg., Univ. of Ala. Med. Center, Birmingham, Ala., (Prof. Emeritus, Mayo Clinic), *"Tissue Transplantation: Principles and Current Status"*

2:30 HELEN B. TAUSSIG, M.D., Prof. Emeritus of Pediatrics, Johns Hopkins Hosp., Baltimore, Md., *"Long Time Observations on the Tetralogy of Fallot"*

3:00-3:30 INTERMISSION—REVIEW EXHIBITS

3:30 J. B. LYNCH, M.D., Assoc. Prof. of Surg. (Plastic and Maxillofacial), Univ. of Texas Medical Branch, Galveston, Texas, *"Current Concepts of Burn Management"*

4:00 PAUL DUDLEY WHITE, M.D., Emeritus Clin. Prof. of Medicine, Harvard Univ. Med. School, Boston, Mass., *"How Long Should We Live"?*

Tuesday, October 14, 1969

8:00 REGISTRATION

9:30 SOL SHERRY, M.D., Prof. and Chrmn., Dept. of Medicine, Temple Univ., Philadelphia, Pa., *"New Developments with Antithrombotic Agents"*

10:00 MAYNARD I. SHAPIRO, M.D., Pres., American Academy of General Practice, Kansas City, Mo., *"The New Family Physician"*

10:30 INTERMISSION—REVIEW EXHIBITS

11:00 ROBERT B. WILSON, M.D., Prof. Clin. Obstetrics and Gynecology, and Head of Sect., Obstetrics and Gynecology, Mayo Clinic, Rochester, Minn., *"Endocrine Contraception"*

11:30 F. E. GREIFENSTEIN, M.D., Prof. and Chrmn., Div. of Anesthesiology, Univ. of Arkansas, Little Rock, Ark., *"Anesthesia in the Geriatric Patient"*

NOON Luncheon Symposiums—$4.00
(Limited to 85 physicians per symposium)
(Tickets must be obtained prior to assembly)

Symposium No. 3 "SKIN DISEASES IN THE GENERAL PRACTITIONER'S OFFICE"
Guest Panelist: NORMAN E. LEVAN, M.D.
Moderator: CLARENCE SHAW, M.D.

Symposium No. 4 "NEW DEVELOPMENTS IN THE DIAGNOSIS AND TREATMENT OF LEUKEMIA"
Guest Panelists: L. W. DIGGS, M.D.
RICHARD P. SCHMIDT, M.D.
Moderator: JOHN W. ADAMS, JR., M.D.

2:00 LUIGI MASTROIANNI, JR., M.D., Prof. and Chrmn., Dept. of Obstetrics and Gynecology, Univ. of Pennsylvania, Philadelphia, Pa., *"Oogenesis and Ovulation: Some Practical Considerations"*

2:30 RICHARD P. SCHMIDT, M.D., Assoc. Dean, Univ. of Florida College of Medicine, Gainesville, Fla., *"Profiles of Headache; Diagnosis and Treatment"*

3:00-3:30 INTERMISSION—REVIEW EXHIBITS

3:30 JACK C. HUGHSTON, M.D., Orthopaedic Surg., Columbus, Ga., and Chrmn., Comm. on Sports Medicine. Am. Acad. of Orthopaedic Surgeons, *"Knee Injuries"*

4:00 ROBERT E. WISE, M.D., Chrmn., Dept. of Diagnostic Radiology, Lahey Clinic Fdn., Boston, Mass., *"Color in Radiology"*



New Members

The JOURNAL takes the opportunity to welcome these new Tennessee Medical Association members.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY
Winston Paulding Caine, Jr., M.D., Chattanooga
Stanley Ross Payne, M.D., Chattanooga

KNOXVILLE ACADEMY OF MEDICINE
Margaret Dowell, M.D., Knoxville
Perry B. McCallen, M.D., Knoxville
Bruce E. Walker, M.D., Knoxville
William T. Youmans, M.D., Knoxville

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY
Joe B. Cooper, M.D., Memphis
Danilo A. Duenas, M.D., Memphis
Michael Gompertz, M.D., Memphis
William A. Potter, M.D., Memphis
Orville W. Swarner, M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE
Edward E. Anderson, M.D., Nashville
Harvey Asher, M.D., Nashville
Charles M. Carr, M.D., Nashville
Robert C. Northcutt, M.D., Nashville
Ronald E. Overfield, M.D., Nashville
Robert N. Reynolds, M.D., Nashville
Samuel B. Rutledge, M.D., Nashville

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY
Claude M. Calcote, M.D., Bristol
Dennis C. Chipman, M.D., Kingsport
Thomas C. Todd, M.D., Bristol

WASHINGTON-CARTER-UNICOI COUNTY MEDICAL SOCIETY
Dudley Dennison, Jr., M.D., Milligan College

WEST TENNESSEE CONSOLIDATED MEDICAL ASSEMBLY
James I. Elliott, M.D., Trenton

NATIONAL NEWS

The Month in Washington
(From Washington Office, AMA)

The Internal Revenue Service plans to audit the federal income tax returns of physicians and other health practitioners who have received more than $25,000 a year in medicare and medicaid payments.

Plans for the special audit were disclosed by IRS Commissioner Randolph W. Thrower at the first of a series of public hearings the Senate Finance Committee is holding in its investigation of the rising costs of the two government health care programs. He said the Department of Health, Education and Welfare had agreed to require intermediary insurance carriers to use physicians' social security numbers on reports of payments under the program in the future.

Finance Committee Chairman Russell B. Long (D., La.) estimated "possibly as many as 10,000" had been getting upwards of $25,000 a year under the programs. Thrower said the initial audits would be for 1967 and would be limited to those receiving more than $50,000.

Long said that the investigation of the committee's staff so far showed "widespread abuse, and fraud, as well as lax administration."

Robert M. Ball, social security administrator, reported his investigators had looked into more than 700 possible fraud cases under medicare. He said more than 300 of these cases were still in some stage of inquiry, and that 14 had been turned over to the Justice Department for prosecution.

"But these should not be taken as a reflection on the 200,000 doctors participating in medicare," Ball said. He added a bigger problem than outright fraud were "cases that don't quite become fraud."

HEW Undersecretary John G. Veneman told the committee that the Nixon Administration wants congressional authority to stop medicare payments to doctors who overcharge, use inferior supplies or engage in fraud.

"Under present medicare law, there is no authority for the program to deny reimbursement to a licensed practitioner, who has demonstrated a clear pattern of fraud, repeated overcharging of the program or the use of supplies which are inferior or harmful," Veneman said.

"We are recommending authority . . . to discontinue future reimbursement and to put all parties on notice to this effect where

on the basis of clear evidence, a finding is made that this is justified by reason of such abuses."

Commenting on the hearings, Dwight L. Wilbur, M.D., president of the American Medical Association, said that the vast majority of physicians serving medicaid patients are not overcharging for their services.

"Most physicians," Dr. Wilbur said, "are acting honorably and with utmost restraint. Fortunately, very few M.D.'s participating in medicaid are guilty of overcharging and otherwise exploiting the program. Such exploitation by a minuscule minority was unavoidable. . .

". . . The medical profession is making a great effort to identify and weed out dishonest doctors who betray their oath as professional men serving the public. We have been successful in this search, but a few physicians remain who still are not identified. We shall search them out and expose them, for the good of the entire profession."

Meantime, HEW issued a regulation limiting the fees paid by states to physicians, dentists and other health practitioners under medicaid.

Under the regulation, a state's medicaid payment to a physician for a service will be limited, with one exception, to the 75th percentile of the customary charge—the maximum customary fee of 75 per cent of the physicians in the area.

If a state has been paying more than the 75th percentile of the customary charge, it must not exceed the medicare level, about the 83rd percentile. A medicaid official said that only two states may have to roll back their fees, but declined to name them.

After July 1, 1970, states may request permission to increase physicians' fees above the 75th percentile if two conditions are met:

1. The average percentage increase requested above the 75th percentile on January 1, 1969, may not exceed the percentage increase in the all-services component of the Consumer Price Index (adjusted to exclude the medical component) or in an alternate index designated by the Secretary of Health, Education and Welfare.

2. Evidence must be clear that the providers and the states have cooperatively established effective utilization review and quality control systems.

The new fee regulation also requires states to revise their medicaid plans to include descriptions and details of their payment structures. A state that wishes to revise its payment structure for practitioners' services or change the payments authorized under it may not do so until the proposed changes have been approved by the Secretary of Health, Education and Welfare or his representative.

States that begin their medicaid programs after July 1, 1969, must arrange their payment structures so that fees do not exceed the 75th percentile of customary charges.

HEW estimated the regulation would result in a saving of $65 million in the first year.

Despite a strong protest by the American Hospital Association, HEW discontinued the overhead medicare-medicaid percentage allowance paid to hospitals, extended care facilities and other institutional providers. It was two per cent for non-profit and one-and-one-half per cent for proprietary institutions. The action was effective July 1, 1969.

Another new medicaid regulation requires states to provide periodic health screening, diagnosis, and treatment for all eligible youths under 21 years of age, effective July 1, 1969.

HEW also established a new classification of institution—called intermediate care facility—eligible to receive federal contributions for the care of aged, blind, or disabled recipients or public assistance is covered in another regulation. This should reduce costs of medicaid by allowing states to relocate substantial numbers of welfare recipients who are now in skilled nursing homes in lower costs institutions, HEW said.

Dr. Roger O. Egeberg, who has been dean of the School of Medicine, University of Southern California since 1964, was selected to be the new Assistant Secretary of Health, Education and Welfare for Health and Scientific Affairs after a five-month delay.

President Nixon nominated Dr. Egeberg after HEW Secretary Robert H. Finch withdrew his unannounced but widely-publicized selection of Dr. John H. Knowles, director of Massachusetts General Hospital,

Boston. Finch said that "the protracted and distorted discussion" about the appointment during the five months the post had been vacant "resulted in a situation in which he (Knowles) would not be able to function effectively in this critical position."

The news media—press, radio and television—generally assigned the opposition to Dr. Knowles to conservative members of Congress, led by Senate Republican Leader Everett M. Dirksen, and to the AMA.

Throughout the public controversy before the appointment, the AMA confirmed its comment to a short statement that it had suggested several names to Finch for the post and that the Association "favored the appointment of someone who would represent the broadest scope of medicine and would not be too closely oriented to any one segment of medicine or the health field." Knowles was not one of the physicians on the AMA list.

A few days after the nomination of Dr. Egeberg, Dr. Dwight L. Wilbur, the AMA President, said:

"During the last five months the American Medical Association has been identified repeatedly as a force opposing appointment of Dr. John H. Knowles as Assistant HEW Secretary for Health and Scientific Affairs.

"We held our silence during the last months of nationwide publicity because we agreed with Secretary Finch to make our suggestions to him and then say no more. We did that. The Knowles protagonists obviously did just the opposite. . .

"In a true sense, we never opposed Dr. Knowles. But we did not support him because we had alternative recommendations."

Those recommended by AMA for the position, Dr. Wilbur said, included:

—Dr. W. Clarke Wescoe, former Chancellor of the University of Kansas, "who withdrew soon after because of personal reasons."

—Dr. Richard S. Wilbur, Palo Alto Clinic, Chairman of the Council of the California Medical Association, and former Chairman of the Board of California Blue Shield, "who happens to be my nephew, a fact which complicated the situation, but who AMA felt was a well-qualified man for this position."

—Dr. John R. Hogness, Dean of the University of Washington School of Medicine, "who serves in the AMA House of Delegates, at high level in the Association of American Medical Colleges, and who has many other distinguished achievements."

The AMA commended the selection of Dr. Egeberg. In a telegram to Finch, Dr. Wilbur said:

"We look forward to a productive relationship with you and Dr. Egeberg in advancing the health care system for the benefit of all the American people. There are many complex factors involved that will call for the wholehearted dedication and contribution of all in the medical profession and in government."

"We believe Dr. Egeberg will be able to bring about the necessary close coordination between government and private sectors in the health care system," Dr. Wilbur said in a supplementary statement. "This is vital to constantly advance and expand the ability to provide quality health care for all Americans."

Dr. Egeberg, 65, is a large, bluff man of Norwegian stock who demonstrated a sense of humor at his first news conference. He is a member of the AMA and a diplomat of the American Board of Internal Medicine. Generally considered a moderate liberal on health matters, he served on several advisory commissions during the Kennedy and Johnson Administration and on the state level in California. One of his major interests has been health care of the poor and he arranged for the USC medical school to be the medical consultant for the neighborhood health center in the Watts district of Los Angeles.

At his first news conference in HEW, he classified delivery of health care as almost the department's number one problem. He said medicare now is "rather well established" in solving a problem. But medicaid, he said, "has run afoul of a number of things, and I don't know that one can blame any one person or any group for this."

A member of the army medical corps in World War II, he was personal physician and aide-de-camp to General of the Army Douglas MacArthur, 1944-45.

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MEDICAL NEWS IN TENNESSEE

New Public Health Commissioner Appointed for Tennessee

Dr. Eugene W. Fowinkle, Director of the Memphis and Shelby County Health Department since 1966, has been named by Governor Ellington to succeed Dr. R. H. Hutcheson as Commissioner of Public Health for Tennessee. Dr. Hutcheson, Commissioner for the past twenty-six years, resigned the post, effective July 1st.

Dr. Fowinkle joined the Memphis and Shelby County Health Department in 1961 and was named director five years later. He attended Southwestern in Memphis and earned his medical degree from the University of Tennessee in 1958, served his internship at the City of Memphis Hospital and in 1962 earned his master of public health degree at the University of Michigan. He has also served as an associate professor of preventive medicine at the U. T. College of Medicine. A recipient of the 1968 Memphis and Tennessee Jaycee Distinguished Service Award, Dr. Fowinkle is a member of the governing council of the American Public Health Association and a fellow of the American Academy of Preventive Medicine.

Dr. Hutcheson has served in the public health field during most of his career, beginning with his internship at the U. S. Public Health Service in Norfolk, Va., in 1930. His first position was as assistant director of the Rutherford County Health Department. Named director of the Williamson County Health Department in 1932, he joined the State Health Department in 1935 and became assistant commissioner in 1940. He was appointed to the Commissioner's post three years later by the late Governor Prentice Cooper. He also served in the cabinets of Governors Jim McCord, Gordon Browning, Frank Clement and Ellington.

The recipient of many honors, Dr. Hutcheson was most recently named Physician of the Year by the Tennessee Medical Association in 1968. The medical profession and all people of the state are indebted to him for his long tenure of dedicated service in administering the health programs in Tennessee.

Vanderbilt University School of Medicine

Dr. James Elliott, head of Vanderbilt's Ophthalmology Division, has announced that Research to Prevent Blindness, Inc. will continue support of the Vanderbilt Medical Center's ophthalmological research with a two-year grant. Dr. Elliott is involved with such immunobiological research as the study of the effect of Imuran (a specially developed drug) in prevention of corneal transplantation reactions.

Vanderbilt's active ophthalmic research program includes a variety of other projects such as: suppression of experimental corneal hypersensitivity by using antilymphocyte preparations, morphologic studies of the horizontal cells in the mammalian retina.

RPB was established in 1960 as a national voluntary foundation to stimulate the growth and expansion of scientific research into the causes of blindness.

University of Tennessee College of Medicine

Dr. Roger L. Hiatt has been named professor and chairman of the Department of Ophthalmology, effective July 1. Dr. Hiatt succeeds Dr. Philip M. Lewis, who retired after serving as department chairman since 1944. Dr. Lewis will be named professor emeritus.

The first full-time member of the ophthalmology faculty, Dr. Hiatt came to the Medical Units in 1964, after serving a preceptorship in pediatric ophthalmology at Washington, D. C., Children's Hospital and Georgetown University. He earned his B.S. degree at Brigham Young University and the M.D. at U.T., completing his internship and residency at the Medical College of Virginia. He is a member of a number of local and national medical and scientific societies and serves on several committees, including the office of a secretary in the American Association of Ophthalmology.

Ophthalmology, formerly a division of the Department of Surgery, was established as a full department in the U.T. College of

Medicine in 1967. The department is affiliated in its training programs with the City of Memphis Hospitals, the Methodist Hospital and the Memphis Veterans Administration Hospital.

★

The National Heart Institute of the NIH has made a five-year grant to Dr. Charles E. Kossmann, chief of circulatory diseases, for support of a graduate training program on circulation in health and disease. Allocated for the first year of the program is $69,500, with $75,000 for each of the following four years. Dr. Kossmann also is the administrator of an anonymous gift to the Medical Units to be devoted to cardiac research. Totaling $100,000, this donation is to be paid over a five-year period.

★

The Department of Pediatrics has been notified by the National Heart Institute of the 11th renewal of a multidisciplinary training grant in pediatric cardiology, metabolism, endocrinology and hematology. Dr. James Etteldorf, pediatrics professor, will administer the award, which will provide $39,250 for the fiscal year beginning July.

★

The National Institute of Mental Health has renewed support totaling $161,684 to the Department of Psychiatry for several training programs. Administered by Dr. G. H. Aivazian, department chairman, the funds include $45,368 for undergraduate training, $85,860 for the residency program, $8,856 for psychology internship training and $21,600 for the teaching of human behavior in undergraduate medicine.

Middle Tennessee Heart Association

The Annual Meeting was a dinner meeting on May 8. Dr. Morse Kochtitzky, as outgoing president, presided. The following officers were elected, their term of office to begin July 1:

Secretary-Treasurer, Dr. John Griscom; Vice-President, Dave Overton; and President-Elect, Dr. Fred Ownby. Dr. Kochtitzky then recognized Dr. Sarah H. Sell, President-Elect since 1968, and who assumed the chair.

PERSONAL NEWS

Dr. Robert Whittle has been appointed to the Knox County Air Pollution Control Board, representing the Knoxville Academy of Medicine.

Dr. Cleland C. Blake, pathologist and director of laboratories at Morristown-Hamblen Hospital, was guest speaker at a meeting of the Uptown Optimist Club held at the Hotel Andrew Johnson in Knoxville, June 27th. Dr. Blake's subject was "The Current Status of Cancer Diagnosis in East Tennessee."

Dr. Allan E. Green, Jr., Memphis, was installed as vice-chairman at the Southern Radiological Conference held in New Orleans in February.

Dr. Theodore A. Waters, clinical professor at Louisiana State University School of Medicine, was guest speaker at a recent meeting for physicians and ministers. The meeting, held at the First Baptist Church in Chattanooga, was sponsored by the Committee on Religion and Health of the Chattanooga-Hamilton County Medical Society.

Dr. James High, Madison, director of the coronary care unit at Nashville Memorial Hospital, was the speaker at a recent meeting of the Woman's Auxiliary to the hospital. Dr. High spoke of the importance of the coronary care unit in saving lives. The present facilities at the unit are being enlarged.

Dr. Thomas Findley, formerly a visiting professor of internal medicine at the National Defense Medical Center in Taiwan, has been appointed Mid-east Tennessee area coordinator of the Tennessee Mid-South Regional Medical Program. Dr. Findley officially assumed his duties in Knoxville, May 15th with offices at 11-12 Henson Hall on the University of Tennessee campus.

Dr. Edward E. Anderson, fellow in cardiology at the University of Virginia Hospital, has completed his graduate training in internal medicine and cardiology, and has joined the staff of the coronary care unit at St. Thomas Hospital, Nashville.

Dr. Paul Spray, orthopedic surgeon of Oak Ridge, represented the Tennessee Medical Association as the guest speaker for the annual Tennessee Secondary Schools Athletic Association Coaches' conference, held at Tennessee Tech in Cookeville, July 21-25.

Holston Valley Community Hospital has added **Dr. James M. Gilbert,** a general practitioner, as the fifth emergency room physician. Dr. Gilbert had been a company doctor for Phelps-Dodge Corporation, a mining company in Bisbee, Arizona for eight years. He received his B.A. degree from Vanderbilt University and his M.D. degree from the University of Tennessee College of Medicine in 1957. He served his internship with the United States Public Health Service in Norfolk, Virginia, and spent three years in the United States Public Health Service in Pittsburgh, Pennsylvania, and Chicago, Illinois.

BOOK REVIEW

CANCER—A MANUAL FOR PRACTITIONERS. Fourth Edition, American Cancer Soc. Boston, Massachusetts, 1969. Nimrod Press, Boston.

This succinct manual on cancer is not only clearly written but has gleaned the practical from a maze of ambiguities that always beclouds the complicated subject of cancer. This book tells it like it is, removing much jargon and technical language. It is written in the broad sense for practitioners of clinical cancer therapy. Medical students, general practitioners, general surgeons, surgical and medical specialists can greatly benefit by perusing this fine up to date manual. A tumor director might well use it as a basic outline for a balanced tumor clinic program.

Diagnosis bearing on the practical is stressed. Numerous authorities in the various fields of cancer therapy have authored the 46 chapters with surprising coherence.

Rarities are omitted and the strength of the book lies in its easy readibility, brevity, omission of the vague and the tying together of modern up to date practical knowledge about cancer in a single volume.

It is recommended reading for all clinicians. Such "pearls" as TNM system of stage classification are sprinkled through the book. There is something here for everyone interested in cancer. Chemotherapy is understandably presented in chart form; cancer control programs; paraneoplastic syndromes; newer epidemiologic aspects of cancer; cancer of all of the body systems, are, all, well laid out in chapter form.

ANNOUNCEMENTS

Calendar of Meetings, 1969

State

Oct. 13-14	Tennessee Valley Medical Assembly, Memorial Auditorium, Chattanooga

National

Sept. 4-6	American Association of Obstetricians and Gynecologists (Annual Meeting), the Homestead, Hot Springs, Va.
Sept. 13-19	American Electroencephalographic Society, El Cortez Hotel, San Diego, California
Sept. 14-20	American Society of Clinical Pathologists, Palmer House, Chicago
Sept. 14-20	College of American Pathologists, Palmer House, Chicago
Sept. 14-20	International Congress of Electroencephalography and Clinical Neurophysiology, El Cortez Hotel, San Diego, California
Sept. 16-20	Congress of Neurological Surgeons, Sheraton-Boston Hotel, Boston
Sept. 21-27	World Congresses of Neurological Sciences (9th International Congress of Neurology and 4th International Congress of Neurological Surgery), New York Hilton, New York
Sept. 26-Oct. 3	American Academy of General Practice, Philadelphia
Sept. 30-Oct. 3	American Roentgen Ray Society, Washington-Hilton, Washington, D.C.
Nov. 6-8	American Society of Cytology, Palmer House, Chicago
Nov. 10-13	Southern Medical Association, Atlanta, Georgia
Nov. 10-14	American College of Preventive Medicine, Philadelphia
Nov. 13-15	American Thyroid Association, Drake Hotel, Chicago
Nov. 13-15	Southern Thoracic Surgical Association, Mayflower Hotel, Washington, D.C.
Nov. 13-18	American Heart Association, Memorial Auditorium, Dallas
Nov. 19-22	Western Surgical Association, Statler Hilton Hotel, Dallas
Nov. 30-Dec. 3	American Medical Association (Clinical Convention) Denver

Tennessee Valley Medical Assembly

The 17th annual Tennessee Valley Medical Assembly will be held October 13-14 in the Memorial Auditorium, Chattanooga. The Assembly, sponsored by the Chattanooga and Hamilton County Medical Society, Inc., will have as featured speakers: Dr. Alton Ochsner, President, Alton Ochsner Medical Foundation, New Orleans, Louisiana; Dr. N. C. Hightower, Director, Scott-White Memorial Hospital, Temple, Texas; Dr. Daniel W. Elliott, Clinical Professor of Surgery, University of Pittsburgh, Pittsburgh, Pennsylvania; Dr. Norman E. Levan, Professor of Medicine, Chairman of the Section of Dermatology, University of Southern California, Los Angeles; Dr. L. W. Diggs, Goodman Professor of Medicine, University of Tennessee, Memphis; Dr. Sol Sherry, Professor and Chairman, Department of Medicine, Temple University, Philadelphia, Pennsylvania; Dr. Maynard I. Shapiro, President, American Academy of General Practice, Kansas City, Missouri; Dr. Robert B. Wilson, Professor, Clinical Obstetrics and Gynecology and head of Section on Obstetrics and Gynecology, Mayo Clinic, Rochester, Minnesota; Dr. F. E. Grelfenstein, Professor and Chairman, Division of Anesthesiology, University of Arkansas, Little Rock, Arkansas; Dr. G. A. Hallenbeck, Department of Surgery, University

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of Alabama Medical Center, Birmingham, Alabama; Dr. Helen B. Taussig, Professor Emeritus of Pediatrics, Johns Hopkins Hospital, Baltimore, Maryland; Dr. J. B. Lynch, Associate Professor of Surgery (Plastic and Maxillofacial) University of Texas Medical Branch, Galveston, Texas; Dr. Paul Dudley White, Emeritus Clinical Professor of Medicine, Harvard University Medical School, Boston, Massachusetts; Dr. Luigi Mastroianni, Jr., Professor and Chairman, Department of Obstetrics and Gynecology, University of Pennsylvania, Philadelphia, Pennsylvania; Dr. Richard P. Schmidt, Associate Dean, University of Florida College of Medicine, Gainesville, Florida; Dr. Jack C. Hughston, Orthopedic Surgeon, Columbus, Georgia and Chairman Committee on Sports Medicine, American Academy of Orthopedic Surgeons; and Dr. Robert E. Wise, Chairman, Department of Diagnostic Radiology, Lahey Clinic Foundation, Boston, Massachusetts.

Entertainment will include the Social Hour and Banquet on October 13th. The Woman's Auxiliary to the Chattanooga and Hamilton County Medical Society has planned special events for wives of physicians who are attending the Assembly.

A registration fee of $25.00 should be enclosed with reservation requests. Checks should be made payable to: Tennessee Valley Medical Assembly. Reservation requests should be mailed to: Chattanooga Convention & Visitors Bureau, 399 McCallie Avenue, Chattanooga, Tennessee 37402.

The program is approved for 12½ hours of American Academy of General Practice Continuation Study Credits.

Symposium on Respiratory Problems in the Newborn

The Department of Pediatrics, University of Louisville School of Medicine presents its third annual Newborn Symposium, November 6-7, 1969. Participants include: Drs. Donald Buckner, Lawrence Davis, Peter Gruenwald, Marshall Klaus, Nicholas M. Nelson, and William A. Silverman. For information write: Dr. Billy F. Andrews, 323 E. Chestnut, Louisville, Kentucky, 40202.

Postgraduate Course in Laryngology and Bronchoesophagology

The Department of Otolaryngology of the Illinois Eye and Ear Infirmary and the College of Medicine of the University of Illinois at the Medical Center, will conduct a postgraduate course in Laryngology and Bronchoesophagology from November 3 through 14, 1969. The course is limited to fifteen physicians and will be under the direction of Dr. Paul H. Holinger. Instruction will be provided by means of animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures, and will include visits to a number of Chicago hospitals. Interested registrants should write directly to the Department of Otolaryngology, College of Medicine, University of Illinois at the Medical Center, P. O. Box 6998, Chicago, Illinois, 60680.

Pediatrics Conference at University of Iowa

Physicians attending a Pediatrics Postgraduate Conference at The University of Iowa, September 10-11, will learn more about cardiac examination and pediatric cardiac problems with the help of a cardiac simulator. The simulator, a computerized electronic apparatus which produces heart sounds and murmurs, provides characteristic ausculatory findings in a variety of disease states for participants listening on headphones.

The session on pediatric cardiology will be among small group discussions and demonstrations which also will cover neurologic problems, ambulatory pediatrics, and learning disorders.

Guest faculty members for the conference will be Dr. Floyd W. Denny, professor and chairman of pediatrics at the University of North Carolina; and Dr. William A. Silverman, chief of the perinatology section at the Perinatal Health Center, Children's Hospital of San Francisco.

Among topics Dr. Denny will discuss will be "The Role of Mycoplasmas as Causes of Diseases in Children", "Lower Respiratory Tract Infection in Children", and "Management of Streptococcal Infections in Children." Dr. Silverman will speak on "Temperature, Food, and Growth in the Neonatal Period", "Neonatal Bilirubinosis" and "The Undersized Newborn".

Other program sessions will include discussions of children and cholesterol, cardiac evaluation by computers, and an emergency infant transport system developed at the University of Iowa.

Conference registration forms and further information on the program and guest accommodations can be obtained by writing: Director of Postgraduate Education, The University of Iowa College of Medicine, 100 F Westlawn, Iowa City, Iowa, 52240.

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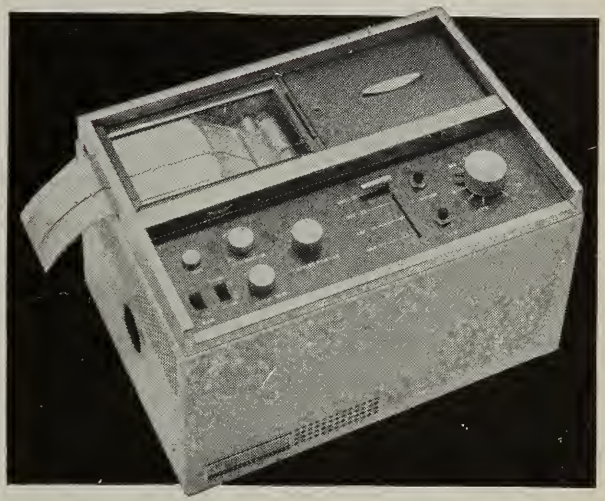
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The Role of the Physician in Utilization Review

Richard A. Wahl, M.D., Detroit

Since the inception of the practice of medicine, physicians have evaluated the quality of medical care. The medical school faculty not only teaches but examines the student. The attending staff members at our teaching hospitals not only instruct but also regulate the duties of the intern and the resident. Even after formal education has terminated, peer groups review the medical records of colleagues. Tissue Committees, Transfusion Committees, etc., are really parcels of utilization in general, the evaluation of medical services. Historically, we have a long precedent for physicians to evaluate the quality of medical services. This is firmly based in the fact that the physician, by virtue of his training, has the right to make medical judgments, but therein also has the responsibility to see that medical care is the best possible within the framework of our present knowledge.

But this responsibility has been exercised in only a small area of the health care field, the hospital. In addition, it has not had the impact it should on the economic factors. Now we are in a public spotlight that will shine brighter rather than diminish and many of the inadequacies in the health care field are being attributed, whether rightly or wrongly, to the physician. At the same time, the battle with disease is fought in an increasingly enlarging arena; the Extended Care Facility, the Office, and the Home. Likewise the scope has become more comprehensive and involves methods, instruments, and medications unheard of just a few years ago. Thus at a time when we must more than ever exercise our responsibility, the field of health care services seems enormous.

Should Exercise Responsibility

Yet, we must not abdicate our role as the authority on the quality of care. Should we not exercise this responsibility, the vacuum will surely be filled by others less knowledgeable, and perhaps even less sympathetic, to the time-honored physician/patient relationship. We should never leave the evaluation of medical services to those whose only credentials are the rhetoric of good intentions.

But the task of the physician regarding Utilization Review need not be formidable. We can use a combined approach to solve the problems of today, but of necessity must work with others, government or private enterprise, involved in the health care field. The non-physician can collect the raw data. Electronic data processing systems can simplify this work and patterns of usage of medical services can be interpreted in the light of medical judgment. The physician can and should remain the pivotal figure in a teamwork approach while using the modern technology that can give us the advantage of being able to have overview and detail simultaneously. Not to apply this methodology would certainly be a sad commentary on our attempts at efficiency when it is most necessary to conserve our time yet perform admirably.

Interpret Appropriate Usage

Thus, a workable solution is for physicians to review the data collected by modern technology and make the necessary recommendations as they see fit. With this approach, since the ultimate responsibility for the care of the patient rests with the physician, it is the physician who interprets what is appropriate usage of medical services. By allowing others to perform the non-medical tasks the physician's time will be conserved rather than encroached upon further.

Utilization Review is now actionable, not conceptual. It will allow physicians to be deeply involved in all aspects of the health services system. Unfortunately, men with years of distinguished service to the community speak out against a combined approach to Utilization Review. Our answer

is in cooperation so the voice of the practicing physician is heard in a consistent fashion. The results should be a Utilization Review program professionally conducted that permits the physician to participate in fundamental decisions of major importance. This is the role we must assume to appropriately answer the imbalanced or misdirected criticism to which the medical profession is now subjected. This is the role we must assume so original intent and eventual outcome are synonymous. This is the role we must assume if we are to continue to assure quality medical care.

(From *Michigan Medicine,* April 1969)

Voluntary Health Insurance Programs and Their Effects on the Physicians' Fee Structure

Paul Burleson, M.D.

I. Preamble

With the nation's medical care cost nearing the $50 billion a year mark, more Americans than ever before—four out of every five—are covered by some form of private health insurance (1967 figures). According to the Social Security Administration $47.3 billion was spent in 1967 for health and medical care in the United States, a record $4.5 billion increase over fiscal 1966. The share of the gross national product being spent for health also continued to rise—from 6 per cent in fiscal 1966 to 6.2 per cent in 1967. The health share of the gross national product has risen 75 per cent since fiscal 1929 when it was 3.6 per cent. Despite these overall gains in health care and spending, in 1967, the private expenditures for health declined from the 1966 level of $31.7 billion to $31.1 billion. Causing this decline are the new federal programs of Medicare and Medicaid. These programs reduced direct payment by consumers to providers of services and increased the amount of health expenditures in the public sector. As a result, private funds paid for only 66 per cent of all health and medical care expenditures in 1967 down from 74 per cent in fiscal 1966, while public funds share of health spending were 34 per cent in 1967, up from 26 per cent the year before. Public expenditures for health care rose sharply in 1967—more than $5 billion—to $16.2 billion from $11 billion in fiscal 1966. Except for one year during World War II when expenditures almost doubled due to the health care requirement of the military services, this was the largest increase in history. An estimated 158,022,000 persons or about 81 per cent of the nation's civilian, non-institutionalized population have some health protection against hospital care. The figure includes about 148,589,000 persons age sixty-five and over. Percentage-wise Blue Cross-Blue Shield enrollment was 38.7 per cent of those with hospital coverage and 37 per cent of those with medical-surgical coverage. A total of 97,404,000 persons had hospital coverage offered by insurance companies and 90,294,000 were covered with surgical expenses by insurance firms. In terms of percentages, insurance companies covered 57.4 per cent of those with hospital coverage and 57.7 per cent of those with surgical coverage. Independent plans provided hospital insurance for 3.9 per cent of the total number covered and 5.3 per cent of those persons covered for surgical expenses.

II. Medical Fee Concept

The original concept of doctors' fees was that of a simple contract. This was a time-honored relationship of a fee for a professional service being paid by the patient to the physician.

In recent years, newer concepts in the fee structure for payment to physicians have occurred—largely since the close of World War II. I refer to the so-called third party involvement in payment for medical service. Initially, some of the large private insurance companies throughout the country initiated sick and accident insurance policies to help in paying the medical-surgical and hospital expenses. As experience in this field was gained by these companies, others entered the field resulting in hundreds of various contracts offering varying degrees of participation in paying medical care and costs. It is estimated that at the present time there are over *800* of these in the United States.

The Blue Cross-Blue Shield plans representing a non-profit cooperative medical care insurance came onto the scene prior to World War II but really began to expand in

the immediate post-War era. In addition, other plans arose such as the Union Health Plans as exemplified by United States Steel and United Auto Workers, who contract out their work to either private insurance carriers or to Blue Cross-Blue Shield. In addition, there are the so-called industrial health and welfare funds such as the United Mine Workers of America which administer their own funds through closed-panel clinics and hospitals.

III. Types of Insurance Payment

With this background, I would like to now discuss the types of insurance payment. Historically the time-honored method of insurance payment for health care has been the so-called indemnity type of payment. This is a fixed fee for a given service representing a partial payment of the doctor's overall fee. This fee in many instances is rather a small part of the overall fee and it becomes the responsibility of the physician to collect the remainder of the fee from his patient. Obviously this type of fee structure has not been satisfactory to the practicing physician inasmuch as stated it is a fixed fee and has not in most instances kept up with the escalating rise in medical care costs.

As a result of this inadequacy, the relative value index plan was initiated in California in early 1950's. This plan attempts to avoid "fixing fees." All of the various medical, surgical and laboratory procedures under this plan are numerated and coded. To each of these, a relative value unit is assigned. No dollar value is affixed. For example, an office visit might be assigned one unit and an appendectomy thirty units. In this case if $5.00 is assigned to the fee for an office visit, the appendectomy would be thirty times $5.00 or $150.00. This allows for variation in fees in different geographic areas (based on overhead, specialty type practice, etc.) and also allows an orderly way of increasing fees to keep up with rising costs of living. This concept of relative value index has met with considerable success in certain areas but as in the case of the indemnity type fee has not met all of the needs of a changing socio-economic climate.

As a result, within the past four or five years, a new concept referred to as the prevailing fee concept has come on the scene. In this case, again a list of all the various medical, surgical and laboratory procedures are enumerated and this time the physician assigns his usual fee in dollars to each procedure. All of the physicians who agree to participate in this plan agree to abide by the charges which they have submitted and sign a contract with a carrier to that effect. The fee for each service is then taken from each physician's list and put on the computer and all the fees for a given procedure which fall within the 90 percentile of what all other physicians in the area are charging, is paid. Only the upper 10 per cent of those fees which are higher than the usual fees are subject to question. It is possible that every physician's fee for a given service in a given community could be paid if all fell within the 90 per cent range. The prevailing fee concept is still experimental in Alabama with the Jefferson County Medical Society working in conjunction with Blue Cross-Blue Shield initiating this plan as a pilot study in 1966. Obviously this type of plan is subject to some criticism, inasmuch as it necessitates the participants in the plan signing a contract with the carrier regarding the fees which he agrees to charge, based on his own profile.

Most recently and within the past two or three years, a new concept has arisen which is referred to as usual and customary fees. Again a profile for each physician is set up and in this case, the physician submits a claim for his usual fee for a given service to the carrier. It will be paid if it is in line with the fee profile and with the fees charged for the same procedure by the great majority of physicians in his own specialty and geographic area. The fee cannot be raised unless written notice is given 90 days in advance. If the usual fee falls within the prevailing range of some 90 per cent of the physicians in a given area as determined by the 90 percentile method, the plan will pay it. The plan will not pay anything higher unless it can be medically justified. With this background, let us go briefly into the philosophy of the newer concept of usual and customary.

Like medicine, health coverage evolves by building upon the technology and expe-

rience that have served its purposes in the past. New developments seldom appear overnight and when they do, they tend to be suspect until a testing period confirms or disproves their value. Programs to pay the usual and customary charges of physicians are emerging from such a period.

The nomenclature preceded the product. As originally applied by commercial insurors, the terms "usual and customary" referred to unpublished fee schedules, derived by carriers from their own claims experience. Claims falling within these schedules were paid; others were negotiated: some successfully, some not.

More recently, some Blue Shield Plans conferred specific meanings upon the terms. "Usual" defined the charge of a particular physician to his patients of normal means for procedures of normal difficulty. "Customary" referred to the range of charges of comparable physicians in the same geographic or economic area for the same procedure.

In combination, these concepts then described as "reasonable" a charge which was normal for the physician making it and compatible with those of his peers. The Medicare legislation's adaptation of this refined approach gave broad currency to the idea and accelerated the movement away from fee schedules.

The tool that made this possible was the computer with its ability to store and retrieve vast amounts of charge data. For the first time, it became possible to ask of a given claim: "Is it usual? Is it customary?", and receive answers that manual processors could not have provided.

Affirmative answers result in individualized payment. Negative ones activate an individual consideration process that is part of all Blue Shield usual and customary programs. Claims that exceed normal levels are reviewed first by medical staff and again if necessary by professional review committees, to evaluate special circumstances which might justify additional payment. The Plan's commitment in such programs is to payment in full, and extraordinary circumstances warranting extraordinary charges are anticipated and accommodated.

Programs without fee schedules offer new opportunities and new hazards to physicians and to their Blue Shield Plans. A fee schedule is always a compromise. If it is to be "realistic" for a community, it will be inflationary for some charges and inadequate for others. A change in the schedule modifies the inequity and sometimes does little more. The ability to divorce payment from these schedules permits the Plan to meet charges as they are, and to get optimum use of the patient's health care dollar. But the increased freedom brings increased responsibility for the medical profession.

The National Blue Cross has now taken the position of requiring each state plan to offer paid-in-full programs based on "usual and customary" fees. Fifty-nine plans now offer such programs as compared with fifteen at the end of 1966.

The chief problem of course at the present time is selling these contracts. At the present time in Alabama, it requires a group of fifty or more participants in a group and it is obviously more expensive than an indemnity plan and thus is more difficult to sell. There are two manners in which the cost can be lowered to the subscriber and that is through a co-insurance factor which can be added. By this is meant the plan would pay only a given per cent of the usual and customary (90, 80, 70 per cent, etc.) leaving the remainder to the physician to collect. The other way in which the expense can be lowered is to limit the amount of coverage or the number of procedures covered in the given contract. (From the *Journal of the Medical Association of the State of Alabama,* May 1969)

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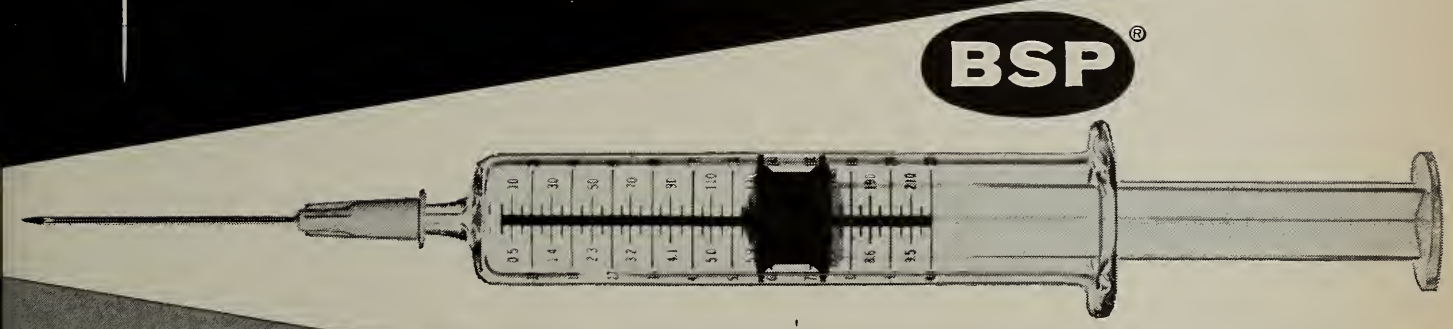
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Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

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If reprints are desired, the requested number should be indicated in the letter accompanying the manuscript. The author will be billed by the publisher.

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Current Federal Medical Legislation and Techniques of the AMA Washington Office*

JAMES W. FORISTEL,† Washington, D. C.

The entire nation is speculating about the decisions that are soon to be made by the new administration. Those of us who are interested in their attitudes on Medicare, Medicaid and the balance of the one hundred health programs being operated in twenty-three departments and agencies of the Federal Government also wait with high expectation. Some of the Administration's critics are complaining that the White House and its team of newly appointed secretaries of all of the government departments have been slow in making up their minds. A number of these critics have been members of Congress, but then, Congress itself is off to a slow start.

Personally, I am not a bit excited, because to review the actions of new administrations and new Congresses, even in my short time in Washington, 23 years, there is always an organization time, and rarely in the odd years following the even-year elections will the White House or the Congress move until after the Easter recess.

But there are so many health and medical programs already on the books that the mere extension of these and legislation which is thus periodically required, provides sufficient material for my report which would be much longer than time would permit on this program if I were to discuss each matter already before us in even scant detail.

I think it would be interesting this morning if you and I played a little game—I want you to try to imagine that we have just finished breakfast in a Washington, D. C., downtown hotel, and I am about to give you a short briefing on what is current and what would be interesting for you to discuss with your Member of Congress during your appointment with him in the next half hour in his Washington, D. C., Congressional office.

Once a year, the Tennessee Medical Association sends a delegation of physicians to the Capitol City, and I have the pleasure, following a 7:30 breakfast, to brief them in anticipation of their visit to their Congressman. At noontime, I have the pleasure of joining this delegation of visiting doctors from Tennessee at a luncheon which they host for their two Senators and their nine Members of Congress. This year that visitation will be held on Tuesday, May 6, and in the visiting group will be your Executive Secretary, Jack Ballentine, his Assistant, Hadley Williams, and Hadley's new running mate, Mike Windham, who was formerly an employee of our AMA Washington Office. Hank Holderfield will probably stay here to tend the store.

So now I begin my briefing to you visiting physicians.

Since your last visitation here in Washington, there have been several changes in our Washington, D. C. Office. As usual, however, we have four Congressional contact men on board, each responsible for calling on the members of the United States House and Senate for about twelve states. In my case, I have an assignment of twelve states including Tennessee. Before your visit, I have called on all of the members of

*Presented at the Annual Meeting of the Tennessee Medical Association, April 12, 1969, Gatlinburg, Tenn.

†Assistant Director, Department of Congressional Relations, American Medical Association, Washington Office.

your delegation at least once. Several I have seen many times in this new session of Congress, especially, Dan Kuykendall, who is a member of the key House Interstate and Foreign Commerce Committee, the committee that will consider approximately 80% of all of the health legislation before Congress. Serving on that committee as well is Congressman Ray Blanton. On the Senate side, Senator Gore serves on the important Senate Finance Committee, and unfortunately his philosophy about medical legislation has never been in tune with that of organized medicine. I would like to report that the junior Senator Howard Baker is moving up in the estimation of all of us in the Nation's Capital. He has a keen mind and his philosophy, if we are any gauge, is entirely acceptable. Because I am assigned the primary responsibility for monitoring the programs of the House Ways and Means Committee, Dick Fulton's office is one of the stations where I often stop, and he and his efficient Administrative Assistant, Jim Drake, have been most gracious and helpful to me concerning the legislation before that committee. I have many occasions to see Congressmen Quillen and Anderson, because both serve on another committee where I have a primary monitoring obligation, the House Rules Committee. Thus far this year, there have been no problems before their committee. I do not have occasion to often visit with Joe Evins or Congressman Brock because they do not serve on committees in the Congress which are concerned with health legislation, but in both instances, the reception which they have accorded me and the willingness on their part to discuss the merits of medical legislation is entirely satisfactory. Congressman Duncan does not serve on any of the health committees, but I have a warm spot in my heart for him and his district, because as long ago as ten years, I traveled to Knoxville and did what I could to interest doctors there in Howard Baker, Sr.'s behalf. The late Representative Howard Baker was a real friend of medicine when he served on the House Ways and Means Committee, and no wonder because physicians in Knoxville like Dick Sexton, Charles Smeltzer and John Burkhart were always at his side when he needed help. I hope your new Member of Congress who succeeded "Fats" Everett, Congressman Jones, will accord us an open door.

As we have discussed in many past years at these breakfast meetings, Congressional interest in the health and medical field is tremendous and ever growing. During my first two years with the AMA, 1949 and 1950, known as the 81st Congress, 251 bills were generated in the House and Senate in this field. In the Congress which just closed, the 90th, covering the years 1967 and 1968, 1453 were introduced. In this same span of time, health expenditures rose from less than $20 billion a year to $50 billion, which is predicted for the current year; and the government share has grown from 10% of these totals to about 35 percent. So, the government is in the medical business in a big way, and this poses many problems about which you and I worry. For this reason another division has been created in the AMA Washington Office—known as the Department of Governmental Relations. This department is headed by Darrell Coover. In it are two physicians who call on the federal officials who operate all of the ongoing programs that last year consumed $16.7 billion in federal expenditures up from $1.7 billion in 1953. Darrell also has two other employees—one who was an aide to Senator Talmadge until his employment by AMA about two months ago. The other was formerly with the AMA field force. His chief assignment is to look after the congressional and executive government problems of all of the specialties in medicine. This department has contacts in the White House, at HEW, in the Military, in all of the 23 agencies of government where there are federal programs.

In the AMA headquarters in Chicago, we have a new Division of Public Affairs headed by Joe Miller, and under his direction there are, in the field, twelve assistant directors of his division, each living somewhere in the four or five states for which he is responsible.

In the case of Tennessee, the Assistant Director of that division lives in Memphis and has responsibility for staying in contact with the medical organizations and their members, not only in Tennessee, but in Arkansas, Alabama, Louisiana, and Missis-

sippi. At this point, I would like to have Mr. Leon Swatzell stand and be introduced, because he has recently been named an assistant director of the Division of Public Affairs and you will be seeing much of him.

Now remember, we are still having breakfast in Washington, D. C., and you are still getting a briefing regarding current health legislative activities.

Let's turn to the one-page handout which has been passed to you earlier today entitled, "Legislative Check List, 91st Congress," and you will note that it has a current date, i.e., April 2, just before Easter recess of Congress began. Now, when you call on your Member of Congress, it will be helpful to have this check list with you so you will not forget to discuss whichever of the current matters you believe will be interesting to him and, of course, you may wish to include several other subjects which are familiar to Tennessee and to both you and the Congressman.

In your visit to the Congressman's office, be certain you get an opportunity to meet his Administrative Assistant, his Legislative Assistant, and perhaps his top secretary. Learn from him, also, the location, the phone number, and the personnel in his district office back in your own hometown, so that the next time you see him, you will be able to say you know all about that district office and that you have met his home secretary and possibly his campaign manager.

Now to the current problems before the Congress as shown on the legislative check list. . . .

Legislative Check List—91st Congress (Apr. 2, 1969)

HEALTH INSURANCE—TAX CREDITS—The first bill reflecting the sense of AMA's San Francisco resolution re: voluntary health insurance premium tax credits was introduced by Congressman Fulton (D-Tenn), a member of the Ways and Means Committee. This legislation would have the Federal Government assume the total cost of public assistance Medical care for those persons with little or no income, and would grant tax credits on a sliding scale to taxpayers depending upon the level of an individual's income or the income of the family unit. Credits for taxpayers would range from 100% down to 25%. This proposal could be considered by the House Ways and Means Committee in the closing months of 1969, but probably will be held over until 1970.

QUALITY AND QUANTITY OF HEALTH CARE HEARINGS—Senator Ralph Yarborough (D-Texas), Chairman of the Senate Labor and Public Welfare Committee, has scheduled hearings of his committee beginning April 15 to examine into availability of medical care, its quality and quantity.

MEDICARE AND MEDICAID HEARINGS—Senator Russell Long (D-La), Chairman of the Senate Finance Committee, will schedule hearings some time after the Easter recess to examine the operation and the cost of both Medicare and Medicaid. Requests have been sent to all state Title XIX Program directors, seeking to obtain lists of all practitioners who have been paid in excess of $25,000 under this program during the calendar year, 1968. Lists of providers who have been paid large sums under Medicare have already been provided to the Committee by the outgoing Social Security Administration. A further questionnaire is being mailed to all state medical societies asking them to set forth difficulties under Medicaid. Drastic amendments to Medicare and possibly Medicaid will probably be delayed until late 1969 or even 1970. There continues to be introduced a number of amendments which would add to Medicare, disabled of all ages, chiropractic services, and self-administered drugs.

HILL—BURTON LEGISLATION—The House Interstate and Foreign Commerce Committee has concluded public hearings on several Hill Burton extension and amendment proposals. Executive hearings by the subcommittee are expected to commence about May 1. At the hearings, the new administration recommended that federal grants for acute hospital facilities be terminated and that a program of loan guarantees be substituted therefor. The Administration proposed a $150 million annual grant program for out-patient clinics, neighborhood health centers and Rehab. facilities, with twenty percent being reserved for such projects designated by federal authorities rather than the states. Witnesses for both AMA and AHA urged retention of federal grants for construction of acute hospital beds. They also endorsed loan and loan grant programs, giving special priority to rehabilitation of existing obsolete facilities. AMA feared "complicating regulatory grief" if areawide planning authorities were given the right to override a state Hill Burton Plan, at least so early in the life of the areawide planning program, which hasn't yet jellied. AMA also objected to assisting in the financing of free standing out-patient facilities which would be hospital operated rather than physician operated. Senate hearings on Hill Burton extension and amendment have not yet been scheduled.

HEART, CANCER AND STROKE PROGRAM—Last year, the RMP law was extended for two years and there seems no urgency by members of the health committees to hold hearings this

session of Congress to further amend or extend this program. Congressional consideration of the program may be delayed until 1970.

IRS TAX RE: ADVERTISING INCOME, NON-PROFIT JOURNALS—The House Ways and Means Committee held a week of hearings on this specific subject, and the AMA testified along with representatives of other non-profit organizations, such as, the Boy and Girl Scouts, the National Education Association, etc. Legislation will shortly be offered by one or more members of the committee, which, if enacted, could somewhat relieve the extent of the tax liabilities imposed by the recent IRS regulations.

FREEZE OF MD FEES—AIKEN AND ANDERSON BILLS—In January, the Social Security Administration called in all of Medicare Part B carriers and directed them to, in effect, freeze payments to MD's for eighteen months. Legislation is now appearing which could cement such action into law. Senator Aiken has a bill which leans on average charges paid by local Blue Shield plans by geographic areas and could authorize Social Security to issue public fee schedules. This legislation would also waive the $50 deductible and 20% co-insurance. Senator Anderson has a bill which would limit payment to hospitals, nursing homes, and rehabilitation facilities to that paid by the largest insurer in the hospital's area. His proposal would apply to both Medicare and Medicaid.

* * *



The author points up newer concepts and information in regard to early diagnosis of diabetes. Old and time-honored methods are outmoded.

SCREENING FOR DIABETES: Standards for Diagnosis*

GLEN W. McDONALD, M.D.,† Washington, D. C.

At the invitation of the Tennessee Diabetes Association, I am pleased to share with you today some of the lessons the Diabetes and Arthritis Control Program and our country's foremost diabetologists have learned about standards for diabetes screening and diagnosis. It is particularly gratifying to me, since furthering the cause of our Nation's diabetics has been a personal crusade for some years.

Now, there are an estimated 80,000 diabetics in Tennessee, and we have identified only one-half of them. This should trouble all of us who are committed to better community health because we know that an unknown diabetic is an untreated diabetic.

Presently, Tennessee has seven counties engaged in diabetes programs and is moving toward expansion in other counties. Laudable screening activities continue with vigor in the city of Memphis. And so it is quite appropriate that our discussion deals with some of the technical aspects of diabetes detection.

The variety of tests, laboratory methods, and diagnostic criteria has quite naturally led to some degree of uncertainty in detection efforts. In the past, a simple test for sugar in the urine was an accepted screening procedure for diabetes.[1] This is no longer adequate in the light of present knowledge. Glycosuria depends only partly on the carbohydrate load and partly on the renal threshold. Many persons who do not have diabetes may show sugar in the urine. Conversely, many people who have diabetes may not have glycosuria. Thus, the test is neither sensitive enough nor specific enough to be valid.

The same may be said of the fasting blood sugar test;[2,3] a negative result is not sufficient to rule out the presence of diabetes. Both tests are commonly negative in the early stages of the disease, and their use would self-defeat a program properly aimed at early detection.

Today's recommended method is blood sugar testing one or two hours after a glucose load or a 100 gram carbohydrate meal. Such a challenge to the body's metabolism will more efficiently identify carbohydrate intolerance, the primary sign of diabetes.

It has been generally presumed until recently that postprandial and postglucose values were roughly similar. Now we recognize that the addition of varying amounts of protein and fat in any loading meal alters the carbohydrate response. Glucose loading is preferred for its greater reproducibility.

The many methods of measuring blood glucose that have evolved over the years need some clarification. Glucose can be measured in whole blood, plasma, or serum using either a capillary or venous blood specimen. Any of these is suitable for screening, but one type of measurement cannot necessarily be treated as interchangeable with another. For instance, when plasma is analyzed the results may be from 14 to 20 mg.% higher than with whole blood.[4] It should also be noted that no study has yet established that plasma and serum values are interchangeable although this tacit assumption seems to be common.

Apart from the varied types of specimens, different laboratory methodologies present their own problems. Some blood sugar tests measure "true" glucose, while others measure total reducing substances. An example of the latter is the Folin-Wu test. In addition to glucose, other nonglucose substances called "saccharoids" are present in the filtrate in different amounts and cannot be reliably accounted for in any one test. In a comparative study, Wilkerson[5] determined that in 95% of cases, the difference

*Presented at the meeting of the Tennessee Diabetes Association, April 11, 1969, Gatlinburg, Tenn.

†Chief of the Diabetes and Arthritis Control Program, HEW, Washington, D.C.

between Folin-Wu and "true" glucose (Somogyi-Nelson method) would vary from 5 to 35 mg.%. In view of the unpredictable variance of the Folin-Wu and the availability of other superior methods, its use should be discontinued.

There are several commonly used procedures to determine "true" glucose.[6] Examples of these are Somogyi-Nelson, glucose oxidase, ortho-toluidine, and the Hoffman test which is fully automated in the AutoAnalyzer. At present, the AutoAnalyzer is the most widely used of all automated instruments for analyzing blood sugar. It extracts glucose by dialysis rather than chemical reaction and produces extremely accurate measurements. This highly versatile instrument can process 40 to 60 venous or capillary specimens in the form of either whole blood or plasma. Plasma is more often used, however, to avoid possible blood clotting in the mechanism.

For some years, many investigators and physicians have relied on the Somogyi-Nelson copper reduction method for screening and for diagnosis and regulation in clinical practice. However, we foresee a phasing out of this test in favor of newer, even more accurate and convenient techniques.

Recently, small devices have been developed that allow the physician to do glucose determinations in his office. These measure "true" glucose by either the glucose oxidase or ortho-toluidine measurements, both of which approach *total* "true" glucose values. The Diabetes and Arthritis Control Program is conducting studies of these kits for their precision. Preliminary results suggest that they are probably accurate enough for screening purposes, but for diagnosis, we recommend verification by more precise methods.

We have also supported development of a high-speed automated method of performing the glucose oxidase test with two new promising instruments, the "Dade" and the "Beckman." Both instruments, now undergoing extensive testing, are designed for easy adaptability in the field.

The 100 gram "true" glucose tolerance test is the accepted standard in nationwide practice for diagnosis of diabetes today. The question of substituting the 100 gram load with a 75 gram load has frequently been raised, but because such a move poses certain legal problems, it does not seem wise to depart from our present standard at this time.

There is no general agreement on the interpretation of the standard glucose tolerance test, as we are all keenly aware. A comparison of results when three different widely-accepted criteria are applied to the same glucose tolerance data well illustrates our source of confusion. O'Sullivan found that prevalence estimates in Sudbury varied from 1.2 percent using Public Health Service criteria to 6.8 percent using British Diabetic Association criteria. Fajans-Conn criteria yielded an estimate of 5.6%.[7]

The attached table lists no less than eleven different authorities. The three most commonly used criteria are those of the Public Health Service, The British Diabetic Association, and the modified Fajans-Conn. The Public Health Service criteria were established for the Oxford Study in 1946 by a group of distinguished clinicians who had had the most experience in diabetes. At that time, no data existed to guide their decisions, but we now realize that these criteria are too conservative to be considered suitable for diagnosis today. The Oxford Followup Study,[8] to be consistent with the first data, continues to use these criteria for reporting prevalence assessments only. The data must not be confused with any relationship to clinical diabetes as diagnosed by a physician. The investigators have, in fact, taken great care to avoid any influence their data might have on individual physicians in the community.

To date, 24 state bodies have adopted the more liberal criteria of Fajans-Conn, Modified. These realistically demark a zone for borderline suspects, a group that needs emphatic followup. Growing acceptance of these criteria recognizes the value of earlier detection of diabetes and the greater promise of possibilities to identify those individuals who should be given benefits of future breakthroughs.

The pamphlet "Screening and Diagnosis in Diabetes Mellitus for Physicians" describes these criteria and is available from Farley-Manning, Associates without charge.* It

*Farley-Manning Associates, Inc., 342 Madison Avenue, New York, N. Y. 10017.

Table 1

Criteria for Interpretation of the Glucose Tolerance Test

Authority	Type	Blood Sugar Determination Method	Time Interval and Blood Sugar Level Considered Positive: Hours after Food or Glucose	Blood Sugar Level
PHS[1]	100 GM GTT	Somogyi-Nelson	Fasting	110
			1	170
			2	120
			3	110
Mosenthal[2]	100 GM GTT	Somogyi-Nelson	Fasting	101
			1	151
			2	101
ADA[3]	100 GM GTT	Folin-Wu	1	200
			2	120
	Postprandial	Folin-Wu	1	200
		Somogyi-Nelson	1	150
Joslin[4]	100 GM GTT	Folin-Wu	1	170
	Postprandial	Folin-Wu	1	170
A. R. Calwell[5]*	100 GM GTT	Folin-Wu	Fasting	120
			1	170
			3	120
Garfield Duncan[6]	100 GM GTT	Folin-Wu	2	130
	Postprandial	Folin-Wu	2	170
Moyer & Womack[7]	100 GM GTT	Folin-Wu	2	140
Ricketts[8]	100 GM GTT	Folin-Wu	3	140
	100 GM GTT	Somogyi-Nelson	3	120
	Postprandial	Folin-Wu	2	140
	Postprandial	Somogyi-Nelson	2	120
Severinghaus[9]	100 GM GTT	Folin-Wu	3	120
Fajans & Conn[10]	1.75 GM/KG Ideal Body Weight	Somogyi-Nelson	1	160
			2	120
			3	90
Fajans & Conn[11] (Modified: Krosnick)	100 GM GTT	Somogyi-Nelson	1	170
			2	120
			3	110

[1] Glucose Tolerance of Adults. U.S. Dept., HEW Publication 1000—Series 11—No. 2, May 1964.
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Ricketts, H. F.: Diabetes mellitus objectives and methods of treatment. Charles Thomas 1955.
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[10] Fajans, S. S., Conn, J. W.: The early recognition of diabetes mellitus. Ann. New York Acad. Sci. 82:208, 1959.
[11] Krosnick, Arthur: Screening and Diagnosis in Diabetes Mellitus for Physicians. Farley-Manning Associates, Inc. 342 Madison Avenue, New York, N.Y. 10017.
* Diabetes mellitus in general practice, Year Book Publishers, 1947. Ch. II, pp. 55-75.

contains detailed descriptions of the administration and interpretation of the glucose tolerance test, the oral cortisone glucose tolerance test, and the intravenous tolbutamide test. Its author is the noted diabetologist, Dr. Arthur Krosnick, of the Diabetes Control Program for the New Jersey State Department of Health.

Population studies have identified high-risk groups for diabetes as persons over 40, the overweight, women who have delivered babies nine pounds or more, and those with a family history of diabetes. Previous studies have shown that the prevalence of known diabetes is higher in the female than in the male after 40 years of

age.[9] However, the sex difference is less real than we had thought, and the risk in the total community is much smaller because more hidden diabetics are found by screening in males after 40 than in females. The higher rate for females below 40 could be accounted for by the more numerous visits women pay to doctors during their child bearing years.

Increasing blood sugar levels are characteristic of advancing age. This has led some investigators to advocate different diagnostic criteria for the older age groups. This issue will remain controversial until we learn exactly what role aging plays in glucose intolerance.

If we are alert and test for blood sugar among high-risk groups, we can detect diabetes in its presymptomatic stages when treatment can prevent acute complications. But important as laboratory criteria are, diagnosis still depends on the physician and his overall appraisal of clinical history, symptoms and findings on physical examination, in addition to laboratory findings.

There are those who question the value of early detection or therapy for prediabetic symptoms. There is a body of evidence in favor of good, early control in minimizing complications,[10] and I concede some to the contrary.[11,12] But, lacking irrefutable evidence for the value of early detectilon, I invite anyone to make a case for late detection and late treatment. We must recognize that identification of the "hidden" diabetic and suspects is important because so many intelligent people are doing research for a breakthrough.

If a cure becomes available, the 1,600,000 unknown diabetics in our country today could not benefit from the remedy. And if a preventive treatment becomes available, there are an additional 5,000,000 unidentified suspects who might otherwise profit from treatment. Tomorrow is promising, and we should be ready to apply tomorrow's cure and prevention to the people we have identified today.

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The Regional Medical Program has been a hazy concept in the minds of many, one might almost say, most physicians. The question usually is—has it merit, or is it a boondoggle. The author has described succinctly "what it is all about."

What Can the Regional Medical Program Do for the Practitioner?*

CHARLES C. TRABUE, M.D.,† Nashville, Tenn.

There are, in Tennessee, two Regional Medical Programs: one, based in Memphis, has responsibility for all Tennessee counties lying west of the Tennessee River, and the second, the Tennessee Mid-South Regional Medical Program, which is based in Nashville has responsibility for all Tennessee counties east of the Tennessee River plus thirteen counties in south central Kentucky centered around Hopkinsville. Since the first of the year, I have been a full-time member of the staff of the Tennessee Mid-South Regional Medical Program serving as area coordinator for Nashville and the surrounding forty counties of Middle Tennessee. There are four other physicians serving as coordinators for the different areas of our region. My remarks will deal specifically with the activities of the Tennessee Mid-South Region although, of course, the Memphis Region has similar activities.

Three and one-half years ago, the President signed Public Law 89-239 which authorized the establishment and maintenance of Regional Medical Programs to assist the nation's health resources in making available the best possible patient care for heart disease, cancer, stroke and related diseases. This is a noble goal and, of course, we all share it—for we know that heart disease, cancer and stroke account for over 70 percent of the mortality in this country—but without proper implementation the words become pure "hogwash." It cannot be properly implemented without the support of the principle purveyors of health care—the practicing physicians. The passage of this act by Congress had been stimulated by the President's Commission on heart disease, cancer and stroke (The DeBakey Commission). One of the findings of this Commission was the fact that the most tremendous medical research program in history was creating knowledge at a rate which made it near impossible for the practicing physician to keep abreast of current developments. The plan, then, was to create a program which would help to close this ever-widening gap between the laboratory and the practicing physician. Congress provided for the establishment of geographical regional programs throughout the country with the stipulation that the residents of each region should establish the ways and means of meeting the greatest health needs of that particular region. Through regional medical programs, federal funds are made available to help finance such projects. This is in contrast to certain other federal programs, like Medicare, in which the policy and rules and regulations governing the program are established in Washington and handed down in one package to the entire country.

One year ago at the meeting of the Tennessee Medical Association in Chattanooga, a report was made to the House of Delegates by the TMA liaison committee to the regional medical programs. This report was critical of certain activities and policies then existing in the Tennessee Mid-South Program. The principal criticism dealt with the lack of opportunity that had been afforded to the members of the Regional Advisory Group to study the description of each project and thus be prepared to cast a meaningful ballot to approve or reject or give priority to any given project. Following this committee report, the House of Delegates adopted a resolution calling on the Tennessee Mid-South Regional Medical Program to make whatever changes were necessary to meet these criticisms. I can

*Presented at the meeting of the Tennessee Chapter, American College of Surgeons, April 10, 1969, Gatlinburg, Tenn.

†Middle Tennessee Area Coordinator, Tennessee Mid-South Regional Medical Program.

now report to you that these changes have definitely been accomplished. Our House of Delegates was quite right in assuming that in the expenditure of public funds, every effort must be made to select for funding only those projects which have survived the most intensive study and review and have been given the highest priority. We have now established such a review process with the unselfish help and guidance of many members of the Tennessee Medical Association and others.

Let me as quickly as possible trace the course of an idea from the time it is conceived in the minds of one or more practicing physicians until it becomes a reality as the basis of an operational project. First, neither Washington nor our own staff propose ideas for a project. These ideas must originate in the community to fit the needs of that community. One of the functions of the area coordinators is to assist the sponsors and discuss with them the ways in which the project can be made to fall within the broad guidelines of the RMP and to help put the idea into a form which is suitable for review. At this point the proposer must present evidence that his local medical society and any institutions involved will give a written endorsement to the project. (Incidentally, this was one of the stipulations of the TMA resolution.) It is then reviewed by other members of our core staff who may be of service in suggesting improvements. The project is then submitted to the appropriate study group in the field of either heart disease, cancer, stroke or continuing education. Each of these groups consists of 18 members, 6 of whom have been appointed by the Tennessee Medical Association. All members of the committee are particularly qualified to make judgments in the categorical field in which they serve. These committees each meet some three or four times a year for a very thorough study of the projects submitted. Following consideration by one or more of these committees, a site visit is made to the project by a team of qualified people who are not directly concerned with the project. The Executive Committee of the Regional Advisory Group is next in the review process, and finally the Regional Advisory Group considers each project along with the recommendations of the study groups, the site visit teams, and the Executive Committee. The Regional Advisory Group is made up of about 60 people from throughout the state, many of whom are practicing physicians. It is this group that makes the final decision to approve, to disapprove or to establish priorities for the various projects proposed. If approved, the project is then sent to the Division of the Regional Medical Programs in Washington for further staff and committee review. If funding is approved in Washington, then we are authorized to proceed with implementation of the project. Some projects have been approved but not funded because the Division itself has limited funds appropriated.

Projects may fall into one of several categories. For example, the establishment of training or continuing education programs for personnel in the various allied health sciences; such as nurses, laboratory technicians, radiology technicians, inhalation therapists, physiotherapists, nuclear medicine technicians and so forth. The desperate need for trained personnel in these fields is recognized by all.

There may be demonstration projects that are innovative and in some ways represent feasibility studies. One such TMS/RMP project, now operational, is the coronary care network which includes five major hospitals and six satellite coronary care units in community hospitals. The question is to determine the advantage to the patient and the local physician of having available a coronary care unit with highly sophisticated equipment, nurses specially trained in coronary care and with telephonic and electronic communication to a central large coronary care unit. Large coronary care units have been established beyond doubt as a means of decreasing markedly the mortality from myocardial infarctions. The advantages and the feasibility of a community hospital having a two-bed coronary care unit probably remains to be established.

One of the basic concepts of the Regional Medical Program is to promote the principles of regionalization. Simply stated, this is the principle of trying to provide all needed medical facilities and services to all of the population while taking great care to avoid duplication of facilities. This goal

has already been partially accomplished in Tennessee in the distribution of ordinary services, but much remains to be accomplished in specialized fields. To suggest an extreme example, it would be obviously absurd to provide facilities for open-heart surgery in several community hospitals within fifty miles of each other, and yet on the other hand, there may be several hospitals in a radius of fifty miles which do not have the facilities available for services needed in every day practice. The Jennie Stuart Hospital in Hopkinsville represents a good example of regionalization in practice. They have a project through which they provide many services to smaller outlying hospitals by means of open telephone lines with a dataphone and teletypewriter. It is not practical for every community hospital to have a pathologist, a radiologist, a cardiologist and other specialists. However, it is quite practical to provide the services of one specialist to many community hospitals through modern electronic equipment and at a cost which is within reasonable bounds. And such capabilities are increasing. Although not yet available, I understand x-rays may now be interpreted with special equipment over the telephone. Surgical pathology slides may be projected by closed-circuit television.

Regionalization requires a considerable give and take, with cooperation of all individuals and institutions, in determining priorities for given services. For example, where three hospitals exist within reasonable travel distance of each other, one may become a coronary care center, one may have facilities for cobalt therapy and the third may develop some other specialized services, with the agreement that all communities would support the established services in order to avoid duplication. Regionalization is difficult to accomplish because it is natural for every community to want to have every service, but that road quickly leads to tremendous increases in the cost of medical care.

Since it is the aim of the Regional Medical Program to keep physicians and other health personnel abreast of the most recent discoveries and developments, then continuing education must be the principal method of accomplishing this aim. Almost all of our TMS-RMP projects have an element of continuing education, but TMS/RMP has not yet evolved a master plan to offer physicians, nurses and dentists in the field of continuing education. The House of Delegates has received the report of a special committee appointed to study methods of delivering continuing education to physicians of Tennessee. Dr. Kampmeier is chairman of this committee and the Regional Medical Program is fortunate in having Dr. Kampmeier to serve as chairman of its continuing education committee. Thus, it seems highly likely that the plan which is eventually evolved will be a joint program of the TMA and the TMS/RMP, or at least will have the support of each organization. There are many exciting methods of delivering such a program and these include two-way telephonic conferences, two-way television conferences, closed-circuit television, audio-visual tapes, the dial-a-tape programs, consultations with specialists by open-line telephones, and others.

The Tennessee Mid-South Program has a project which has been approved but not funded, which, if and when put in operation, would hopefully be of value to every health professional in Tennessee. This proposal would link up all of the major medical libraries in the state with open telephone lines. At the central library, facilities would be available for the reproduction of library material and services would be available for library research; for the assemblage of selected bibliographies; for translations; and for the loan of certain volumes. Thus, the material in every medical library in our region would become available to every health professional in our region upon request by telephone and without cost.

The title of this paper is "What Can The Regional Medical Program Do For The Practitioner?" and you may feel I have not answered the question. I am aware that the majority of practicing physicians in Tennessee have not yet realized any direct benefit from our program. I know also that many of you feel that too much of the program is centered around the medical schools and that the rest of the state is being forgotten. The entire aim of the Regional Medical Program is to make availa-

ble to every patient, and therefore, to every doctor, the recent developments and techniques and knowledge gained in the experimental laboratory, the scientific institutions and the medical schools. To accomplish this aim, it is necessary to have the support of the medical schools in stimulating programs and in helping to carry out clinically applied experiments in the delivery of health care and to a certain degree in serving as the point of origin for many of the efforts in continuing education. As the broad design of our program develops, it is certainly our hope that we will have more operational projects in the field, involving a much broader segment of our medical population. To accomplish this will require initiative and considerable effort on the part of local physicians, groups of physicians, hospitals and other agencies in creating projects designed to meet the specific needs of their individual communities. If Congress is generous in its future appropriations, then there are certainly many ways in which the program can be helpful to local physicians through projects of their own design.

* * *

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Early History of Medical Education in Nashville

The story of medicine is dynamic and inspiring no matter from which angle it is approached. It is closely interwoven with the story of peoples, of civilization and most of all of human minds. On one hand it springs from folklore and superstitions; on the other hand, from intelligent minds, culture, labor and the constant search for truth by men such as Dr. Owen H. Wilson. Whatever else it is or may be, the story of medicine is never a dry repository of names and formulae.

When I came to Vanderbilt in 1943 Dr. Wilson was then 75 years of age, very keen of mind and memory. I visited him frequently in his home and he would tell me about the early days, not only of medical education but of his practice, the way communicable disease was handled, the importance of breast feeding, his trips as a consultant into the country by horse and buggy, and the differences in the medical care and handling of cases then and today. I was fascinated by these stories and over a toddy, which he enjoyed every bit as much as I did, I would insist that he write what he had told me. He was kind enough to do this and I have rather extensive notes in his own handwriting. Further reports on medical education of his time will follow. (Amos Christie, M.D.)



Dr. Richard Douglas
(1860-1908)
M. D. Jefferson Medical College 1882
Professor of Gynecology and Abdominal Surgery,
Vanderbilt University

OWEN H. WILSON, M.D.
(1870-1960)
(As Told to Amos Christie, M.D.)*

When one considers the rapidly expanding academic community with the inevitable moving about of full-time personnel, it is interesting that since its founding there have been but three Chairmen of the Pediatric Department at Vanderbilt School of Medicine. Two of these since 1927 have been full time, Dr. Horton Casparis and myself. The pioneer, of course, was Owen H. Wilson, one of the Old School part-time teachers and practitioners. He became a Clinical Lecturer in Pediatrics in 1897 and maintained this position until 1905 when he became Professor of Pediatrics and finally when Dr. Casparis came and the school was reorganized along full-time lines he became Emeritus Professor, a position which he maintained until his death in 1960.

Dr. Wilson realizing that his Medical School class of 1891 was becoming extinct, felt that it was incumbent upon him to attempt to describe medical education at Vanderbilt at that period. He was interested in students and hoped that they would appreciate the "struggles of their predecessors in order that these blessings should be theirs." Generous quotes not otherwise indicated are his own language and phraseology and too picturesque and personal not to occasionally use verbatim.

Dr. Wilson's background was one of the post-Civil War period. It was the days of reconstruction, of the carpet bagger, of the Ku Klux Klan and of the bustle. He mentioned many times the depression which existed then without Federal aid and the occasional roving unsettled former Confederate soldier who would ride up to the gate and request lodging which he always obtained

*From the Department of Pediatrics, Vanderbilt University School of Medicine

while Dr. Wilson's father and the soldier would fight the war over again until bedtime.

There was tradition for Medicine in Dr. Wilson's background. Dr. Wilson's grandfather, Dr. John R. Wilson, was born in South Carolina in 1799 and was a graduate of Transylvania in 1825. He did the first successful operation for intussusception in America in 1830 and his fee for this was $5.00. It was the first recorded similar operation in America, the third in medical history. Original medical notebooks of Dr. John R. Wilson in the Transylvania days are to be found in Vanderbilt Library for Historical Medicine. Description of medicinal qualities of the pokeberry, of puerperal sepsis and dysentery are to be found making it more understandable to find Dr. Owen Wilson's diary notes of New York Clinics of the 1890's also in that library.

Dr. Owen H. Wilson was born July 20, 1870 in Sumner County near Saundersville, Tennessee. This small settlement is about 21 miles from Nashville on the Gallatin Pike, a place for many years called "The Wilson Farms, Inc." It is now occupied by the Comer family. Dr. Wilson was the second son of Captain (Confederate States of America) Thomas B. and Lucy Gwathmey Wilson.

Dr. Wilson and his brothers went to a one-room school and he told me of his two mile ride each day on "Old Fanny" which had been ridden by one of Morgan's Raiders on his Ohio trip. Old Fanny subsequently broke her leg but then they took their father's wartime cavalry mount, old "Sam Caldwell," and rode her for a year until she gave out on account of old age and they walked the four miles a day.

Dr. Wilson and his brother, Tom, age 14 and 15 respectively, entered Vanderbilt University in September 1884, which was the ninth year of the University. Dr. Wilson graduated in Engineering in 1889. A cousin, Dr. Richard Douglas, the famous "Dixie" Douglas, had just returned from a postgraduate study period in London. He persuaded Dr. Wilson to take up Medicine. He entered the Medical Department of Vanderbilt University in 1889 with nearly four hundred other students in the class. The



Dr. Owen H. Wilson
Vanderbilt Medical Student, 1891

sessions lasted from October 1 to March after which time they repeated the course and graduated in two years or in academic terms only eighteen months after starting medicine.*

*Dr. Wilson was married in 1894 to Evelyn Byrd Richards. They were not blessed with children but in 1952 when Dr. Wilson became ill his niece, Mary Tom Wilson, now Mrs. Lewis Herndon, moved back to Clarendon Avenue in Nashville to look after her Uncle Owen until his death in 1960. The home was almost a pediatric clinic with three charming grandchildren growing up there. These are Mary Lewis, Owen Wilson and Thomas Edward Herndon. To these were added children into the fifth generation of Nashville families who depended on Dr. Wilson for advice, immunizations and treatment.

Occasionally I might be called on to go to the refrigerator for a biologic or antibiotic.

Dr. Wilson was Mildred Stahlman's god-father.

The great-grandfather of Dr. B. K. Hibbett, III, a member of Vanderbilt Obstetric and Gynecology Department, was Dr. William Lunsford Wilson. Dr. Owen Wilson's father, Thomas B., and William Lunsford were brothers.

I am indebted to Mrs. Lewis Herndon and to Mr. Stanley Horn for many of the illustrations in this article.

In a further effort to connect the old with the new or recent, the following information is pertinent.

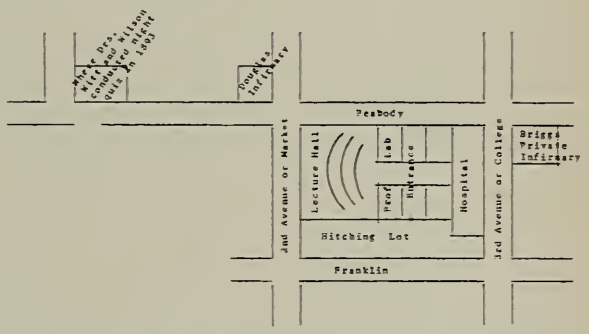
Medical Education of the Period

Facilities. Judging from the descriptions of medical education in 1825 which can be found in James Flexner's book, "Doctors on Horseback" there had been very little improvement in the 65 years which elapsed between the writing of the book and Dr. Wilson's matriculation. In those days the student was required to be associated with a physician during the college terms and one year more either before or after. This was a remnant of the old apprentice or preceptor system. So that in 1889 the students were supposed to have a connection with a practicing physician or a preceptor but this was only a nominal requirement.

When Vanderbilt University was organized in 1874, and instead of starting a new medical school that department was amalgamated with the already existing one of the University of Nashville. The only connection was the appearance of the Chancellor at Commencement exercises. On graduating the student could choose the school from which he wished his diploma and the next year by paying $5.00 more could get another diploma from the other school with which to adorn his office wall.

Rivalry between the two schools was intense. Doctors all over the South were written requesting the names of new students. Someone met incoming trains and prospects were treated royally until they matriculated. Each school accused the other of fee cutting. During the first few days many professors devoted their hour to extolling the merits of "our" school and reviling the other. One took the Tennessee catalogue and discussed and cussed each member of the faculty seriatim. Some refused to "sling mud," at least from the rostrum. The professors *owned* their chairs and divided the "spoils," much as Flexner describes in Daniel Drake's time, 1825. The total Medical School intake was about $25,000 and the expense almost negligible, two janitors, gas light and three large stoves with a small salary to the demonstrators. The average was about $2000 to $2500 to each professor for three lectures a week for 20 weeks. When a professor died his successor was elected by the faculty but had to pay the deceased's estate $4000 for his chair. Aside from the compensation a professorship had an immense value in referred consultation work and this explains the rapid increase in the number of medical colleges. However, these halcyon days did not last long. The increase to 3 years and the entrance requirements reduced the number of students. Dr. Wilson was elected Professor of Anatomy in 1895 and for the first year he received $290 and that was the last money he ever received for teaching except a small sum from the Commonwealth Fund for postgraduate teaching in later years. In fact with the improvement in laboratory equipment he felt that they always finished in the "red."

By 1891 Vanderbilt was so popular that only one student selected the University of Nashville and, of course, he was awarded the faculty medal.



Upon entering Vanderbilt School of Medicine on September 1, 1889, there must have been a month's premedical or orientation period, for Owen Wilson, strongly influenced by his cousin, Dr. Douglas, mentioned above and subsequently, said there were two or three "desultory lectures in the forenoon by the sub-faculty but dissecting rooms were open in the afternoons and evenings." The regular session began on October 1 and continued until the first Wednesday in March.

The college was located in a large square between Maxey and College (2nd and 3rd Avenue South today) and Franklin and Peabody Streets, now a city recreation park. Fronting on Third Avenue, that is College, was a large hospital, two stories high and a basement. On the first story

there were two huge wards for white males and white females and above two similar for Negro males and females. That same year, 1889, the City Hospital had been completed so this hospital was deserted. The main lecture hall in the rear of the hospital seated 400 and above this was the dissecting room. Between the dissecting room and the hospital and connecting with both was the surgical arena used one hour for surgical clinics and the next for demonstrations on the cadaver. Lectures were from 8 to 11 A.M. and from 2 to 4 P.M. with dissecting at night with gas lighting. The first electric light in the building was about 1893—a very poor bulb, no meter and a charge for electricity of $1.00 per month per bulb without limitation of use. At 11 A.M. there was a trek to the City Hospital for a clinic before the combined classes of Vanderbilt and the University of Nashville Medical College. This latter was located at 614 Broad Street in what is now the Ansley Hotel. Clinics were held by members of the two faculties on alternate months. From 6:30 to 7:30 P.M. quiz classes met. Each professor had an assistant, a Quiz Master, who twice weekly met his quiz class, reviewing the lectures given by the professor, asking questions such as the professor would ask in the dreaded final "Green Room." The extra fee of $5.00, of course, went to the Quiz Master. Every student also provided himself with "Quiz Compends" which with possibly Gray's Anatomy was the usual extent of his library.

Toward the end of February the seniors paid $25.00 each for a "Green Room" ticket, a small green piece of pasteboard, and then singly or in small groups would go to the professor's office downtown and between patients' appointments would be taken into his consultation room and asked a few questions. The professor would then sign the green ticket and write a grade in his notebook. Usually three or four rowdy students were flunked each year. The student with the highest grade was appointed interne to the City Hospital, and on alternate years this faculty could appoint a third interne, known as a pharmacist.

The fees were $65.00 + $5.00 contingency per term with $25.00 extra for graduation. On matriculating the student was assigned a seat and it was supposed that seeing him regularly in his seat would assure him of the professor's vote in the Green Room. Members of the faculty were always called "Professor" and the student dubbed "Doc" the moment he stepped into the college.

Even in the old days anatomy was taught thoroughly, especially in the dissecting rooms. To the Professor of Anatomy fell the responsibility of providing material, though the janitor usually did the dirty work or brought the cadaver from snatchers. In 1895 they had no janitor and this job was filled by Dr. Witt and Dr. Wilson and they had some exciting experiences procuring dissecting material. The next year they contacted a Negro doctor who was also superintendent of one of the largest Negro cemeteries who furnished "stiffs" at $12.00 each F.O.B. cemetery. Six students were allotted to dissect two subjects each term. Dr. Wilson did most of his dissecting privately under Dr. Douglas' office, 206 Fifth Avenue North or rather under the sidewalk, this cellar being lighted by a coal hole in the sidewalk.

There was no attempt to grade the courses and the same lectures were given each term. Dr. Wilson remembers the first lecture was always by Professor T. L. Maddin on chronic dysentery—"Give him Ipecac, gentlemen—Ipecac" (not a bad guess by the way). Dr. Wilson reminded us that Vanderbilt University was considered one of the best schools in sharp contrast to the "diploma mills" of every large city.

Dr. Wilson said he went to a surgical clinic by "Old" Briggs (Father Briggs, William T., was Professor of Surgery while his son, Charlie, was Professor of Surgical Anatomy). By "Old Briggs" it was not meant to be "impolite" but just to distinguish him from Charlie, his son. His surgical clinic was held in the amphitheater on the third floor, one passage leading to the hospital and the other to the dissecting room and it was used in alternate hours for surgery and demonstration on the cadaver. The patient this day was a young man with a necrosis of the twelfth rib. There had been an abscess opened leaving a discharging sinus. Dr. Briggs entered wearing a

long "Prince Albert," an imposing figure with his long white beard. The amphitheater was crowded. (Dr. Wilson's graduating class had 159 men). The patient was rolled in from the hospital, ether was started, Dr. Briggs removed his coat and his cuffs (detachable), rolled up his sleeves and donned a long white oilcloth apron, not too clean. Someone brought in a tin washpan of water and put it on a chair. "I never did see it used, however." He opened his bag and took out a knife, a grooved director and bone forceps, grasped the rib, pulled it out and waved it above his head. The patient, only partially anesthetized, was writhing under the impulse, some students applauded, some groaned and a few fainted. All this was done in less time than it takes to tell it, not over two minutes. Remember Briggs was trained in Transylvania Medical School under Dr. Dudley, the famous lithotomist who had a record of removing bladder stone in 54 seconds—quite a feat in preanesthetic days. We cannot establish a kinship between this Dudley and Vanderbilt's Dean W. L. Dudley or of the celebrated Episcopal Bishop Dudley.)

There was bad feeling between the faculties of the two schools and a story told to me by Dr. Wilson is a story in itself but related to the development of the bad feeling. It seems that one of the bodies removed from the grave for dissecting purposes happened to be that from a prominent local family who went to the cemetery the next day to do some final memorializing of their late departed daughter. They found the grave desecrated and empty and went to the authorities. There was among the Vanderbilt faculty some infiltration into the police department and information came back to the faculty that the family was searching for the body. Whereupon members of the Vanderbilt faculty, Dr. Wilson denied that he was a party in this, removed the body from the Vanderbilt dissecting room to the doorstep of the University of Nashville where it was found by the family. This incident according to Dr. Wilson started "quite a row." One prominent member of the University faculty took a shot at another. The Vanderbilt faculty member who "dumped the body" was arrested, fined $2500 and sentenced to six months in jail. The jail sentence was remitted though it caused great consternation in the faculty. The feud ended when the participants shook hands many years later and the "new Vanderbilt" was organized. This was the origin of much of the bad feeling and the castigation and vituperation mentioned above by Dr. Wilson which members of the faculty engaged in before the medical students.

One of the subjects for continuous discussion was the "germ theory" of disease—about half of the faculty accepted it, the others, especially these in the Chairs of Surgery and of Obstetrics, spent most of their time ridiculing it, so much time was wasted and much energy expanded learning to differentiate "ichorous and laudable pus." Pasteur, Koch and Lister were still living and preaching but they either got enthusiastic reception or ridicule. Medical lectures were full of "miasma," "temperament" and "diatheses." The students were taught that physical exposure was unnecessary in conducting a normal obstetric case or in passing a female catheter. Wounds occasionally healed by "first intention," but usually there was pus, "laudable, ichorous or sanguinolent." Instruments were kept by the "antiseptic" surgeons in carbolic acid solution, hands were soaked in 1:2000 mercury bichloride solution, or after rubbing off all the skin with a nail brush were immersed in a solution of permanganate of potash, then in oxalic acid solution to remove the stain. Halstead of Johns Hopkins invented rubber gloves because his head nurse was his assistant and he did not want her hands ruined by such rough treatment. They were married soon after this invention, according to Dr. Wilson.

Chloroform was the anesthetic of choice for children, for emergency abdominal operations, obstetric cases and at night. The next most important man after the surgeon was the lamp holder. Even with daylight he was often useful as most of the operations were done on a kitchen table in a dark room. Hospitals were full of patients with infection. Dr. Wilson had never had any trouble with chloroform, though often in difficult obstetric cases in the country he

gave it himself and then made a forceps delivery.

Venesection was taught but he never used this in the clinic. He himself had been bled by a country doctor—their family friend and advisor. After a hot day digging potatoes he had a sudden rise of fever and headache. The doctor said he was threatened with "brain fever" and bled him copiously. He remembered a sense of relief but nothing unpleasant. Death certificates were often signed "teething," "worms," "convulsions," "congestion." The third congestive chill was always thought to be fatal.

The Medical and Surgical Clinics were most unsatisfactory. The combined classes of the two schools crowded the amphitheater of the City Hospital so it was impossible to see the operation or demonstration. One or two students were called to examine the patient.

Dr. Wilson saw the first appendectomy in Nashville in 1889, performed by his cousin, Dr. Richard "Dixie" Douglas. The Lawson-Tait treatment was universally used for appendicitis, that is, magnesium sulphate every 4 hours and an ice pack to the right iliac region. If the patient was not well after 2 days they would operate but usually on an abscess.

In the spring of 1890, Dr. W. T. Briggs operated for an ovarian tumor before the class. It was quite an occasion. Doctors from adjacent counties were invited and they all came. The operation was performed in one of the wards of the abandoned hospital in front of the college. The table was in one corner next to the window and into the room crowded nearly 400 people, students and doctors, all standing. Of course, only very few saw anything but they could at least say that they had been present when a surgeon had the termerity to invade the abdomen.

Dr. Wilson described the occasion of another early or oldtime ovariotomy. It was the custom in those days for the Mayor to order the streets closed in case of severe illness to prevent noise from disturbing the patient. This patient was a prominent society lady and lived at 1513 Broad. On account of the mule car line the street could not be roped off. For 100 yards on each side of the house a three inch layer of sawdust was spread and a "quiet" sign placed at each end of the street.

The hospitals had no provision for private patients, only the very poorest went there. The daily cost of maintenance was about 30c per patient and still the management was accused of graft. In 1890 Dr. Douglas opened a private hospital (12 beds) at 16th and Hayes Street and soon afterwards it was followed by several more which were "modern." Even then most of the operations were done in the homes. The hospital was a *last* resort. There were only three "trained" nurses in town and they were not kept constantly busy even at $3.00 for 24-hour duty.

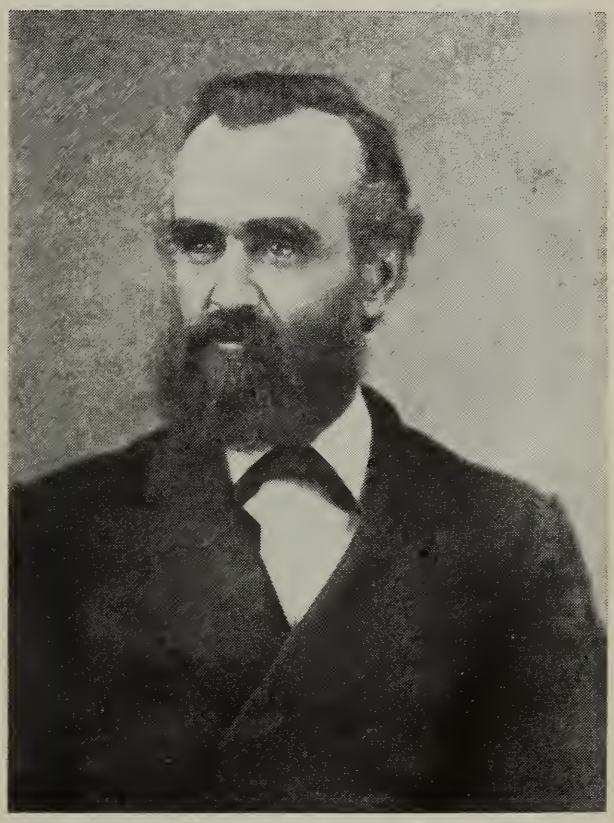
The Faculty. In 1889, Dr. Richard Douglas, Dr. Wilson's cousin referred to above, returned from a postgraduate course in London and was much impressed with modern surgery. He had an ambition to teach and he was a "natural" teacher, very popular with students, but not being on speaking terms with Briggs or Eve he could not get an appointment in either of the medical schools. He rented a vacant store at 104 Fourth Avenue North and every evening between 6:30 and 8:30 would address such students as wished to hear him and every night the room was full. The next year it was quite evident that he had to be a teacher. The Chair of Gynecology was created for which he was paid $3000. This was promptly divided among the faculty. He was a wonderful success as a teacher.

Dr. Richard Douglas was also the first teacher of antiseptic surgery in Nashville and being by nature very neat he also produced asepsis. He scoured the city for clinical material to be used for teaching, operated on the patients before the class or sections of it. He took care of patients at his own expense in a rented house rather than risk the City Hospital. Often he operated on dogs before the students. To him, together with Chancellor Kirkland and Dr. W. L. Dudley, is due the rapid improvement in the Medical Department of Vanderbilt after 1895.

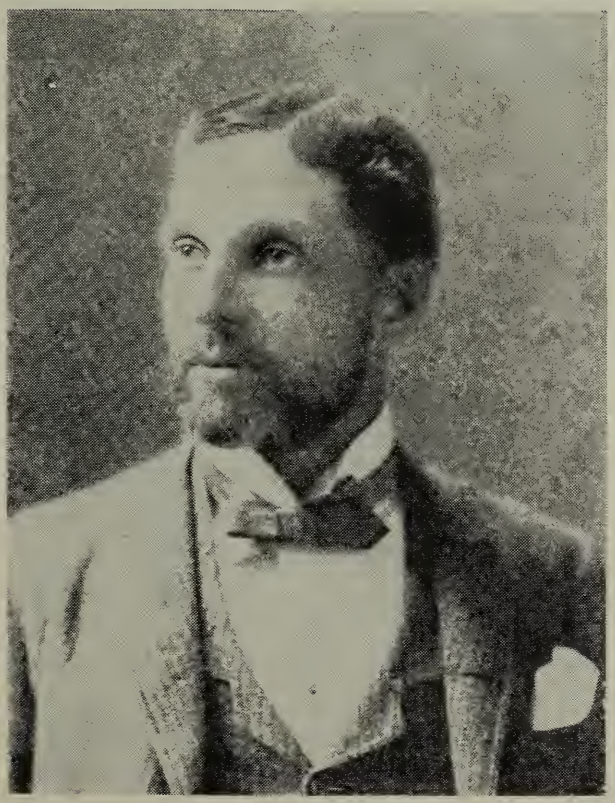
Dr. Thomas L. Maddin, M.D., University of Louisiana, 1849, was Professor of Principles and Practice of Medicine. Even from

that title one can imagine that in those speculative days his lectures were full of such obscure terms as "diathesis," "temperament" and "miasm." This tendency reflects the influence of such men as Rush who must have lain awake at night hatching up some metaphysical theory and then trying to adjust the behavior of disease to it rather than reverse of the process. Dr. Maddin was a very frail appearing man with a long white beard. He never held a clinic. His portrait was given to the Society for Historical Medicine at Vanderbilt by his kinsman, John K. Maddin, Sr., of Nashville. His gold headed cane also is in the Vanderbilt Archives.

Dr. William L. Nichol (Treasurer), University of Pennsylvania 1849, was Professor of Practice of Medicine and Diseases of Women and Children. Dr. Wilson did not remember that he ever touched gynecology and the only pediatrics he spoke of was the contagious diseases and exanthema and the rule for adjusting adult dosage to the child. Dr. Nichol rarely spent over ten minutes at the patient's bedside. He would get two students to see the patients taking great delight with biting sarcasm to ridicule them. Both he and Dr. Maddin enjoyed huge patronage. They had every attribute then required—age (nearly 70), experience, personality and whiskers. Dr. Nichol was surgeon on one of the ships with Perry's squadron when he opened Japan in 1853.



Dr. William Nichol
(1828-1901)
M.D., University of Pennsylvania 1849
Professor of Medicine, Vanderbilt University



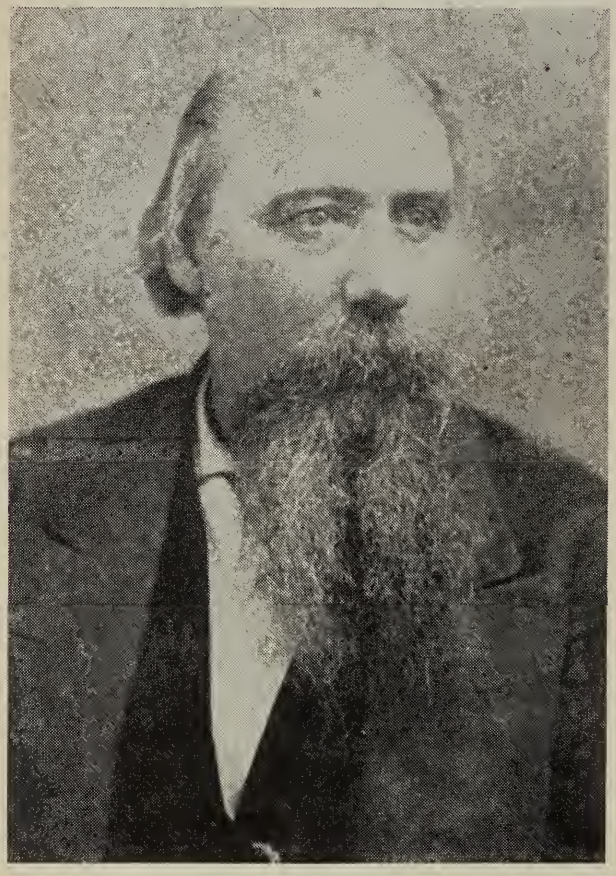
Dr. William L. Dudley
(1859-1914)
Professor of Chemistry

Dr. William T. Briggs, at one time (1890) President of the American Medical Association, was the surgeon for Middle Tennessee, southern Kentucky and northern Alabama —a wonderful personality. He was a skillful, dexterously, rapid operator, probably due to the fact that he began surgery in the pre-anesthetic days. He spent most of the time ridiculing the "germ theory" but was remarkably successful nevertheless.

Thomas A. Atchison, M.D., Transylvania 1848, was Professor of Therapeutics, State Medicine and Materia Medica, an interesting, fluent speaker who said very little. He also lectured on dermatology. Dr. Wilson quoted him as follows, "There are three kinds of skin disease, one arsenic cures, one sulphur cures, and one all hell can't cure."

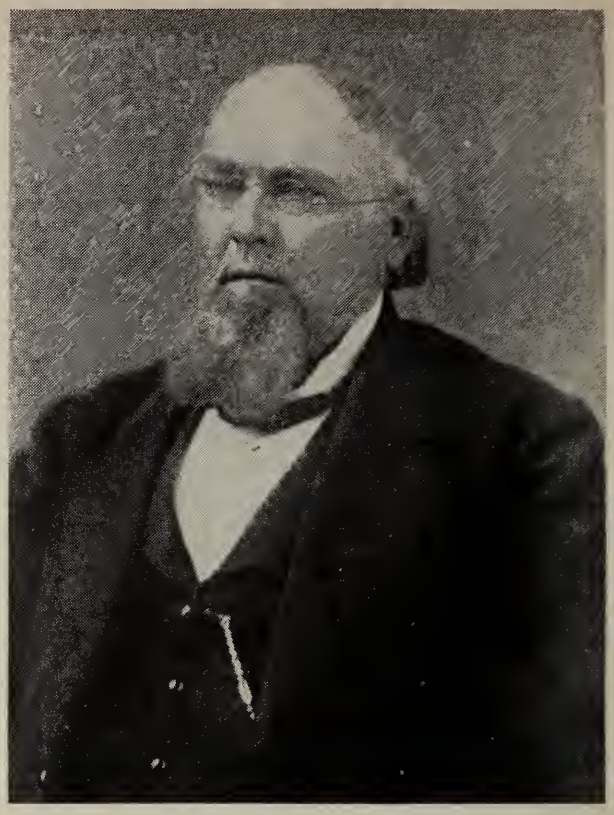
As Dr. Garland said, he had "diarrhea of words but a constipation of ideas."

Dr. Thomas Menees (1823-1905), M.D., Transylvania 1846, Professor of Obstetrics and Dean of the Faculty 1873, had been a member of the Confederate Congress and was apt to remind the students of that at every lecture. It was generally conceded that the Professor of Obstetrics in every school should be an orator and Dr. Menees filled the bill. He kept the students spellbound but often wandering far afield. He taught that childbed fever was a specific disease probably of miasmic origin similar to malaria and typhoid. He also thought in normal deliveries no exposure of the patient was permissible and that exposure was unnecessary in passing a catheter.



Dr. William T. Briggs
(1828-1894)
M.D., Transylvania University 1849

Dr. John H. Callender (1823-1896), M.D., University of Pennsylvania 1855, Professor of Physiology and Psychology, was a highly cultured scholar but his lectures were over the head of most of the students. He was a Confederate surgeon. He was Superintendent (1870-1895) of the State Hospital for the Insane.



Dr. Thomas A. Atchison
M.D., Transylvania University 1848

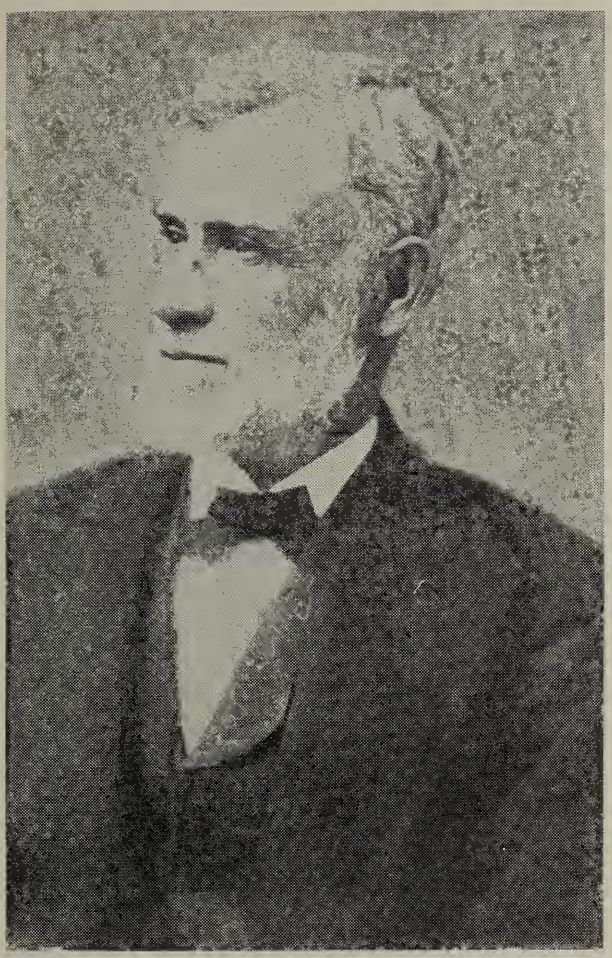
Dr. J. M. Safford taught chemistry but had no laboratory. He was also Professor of Botany and Geology in the Literary Department.

Dr. G. C. Savage, Secretary of the Faculty (Dean), taught diseases of the eye and ear and did it well. At that time there were only three specialists in town (only eye and ear men were rated as specialists). Every surgeon thought himself at least competent to do a cataract extraction. Dr. Savage, Dr. Kate Zerfoss' father, was one of the founders of the Southern Medical Association, of which he was President in 1909.

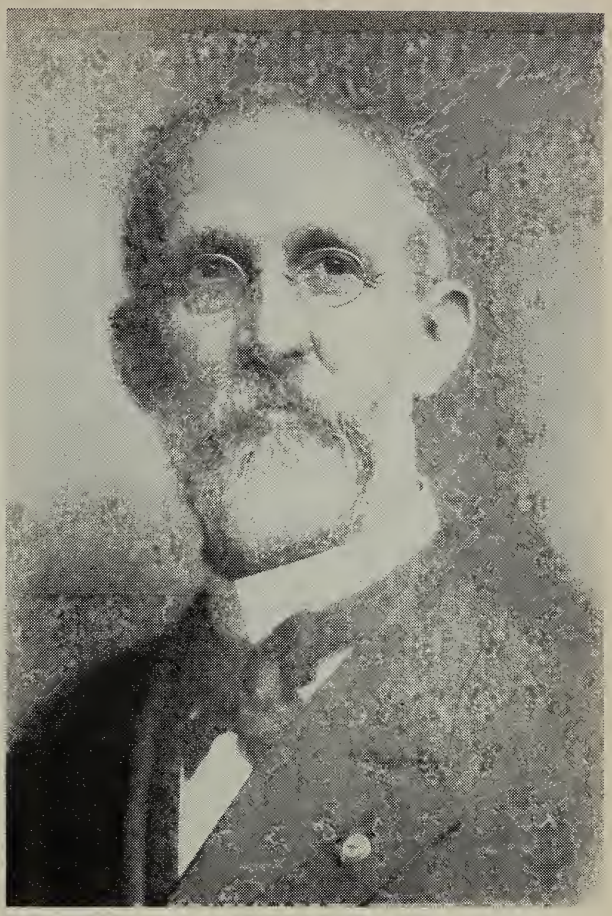
Among the younger men (under 50), Dr. Charles S. Briggs taught surgical anatomy and operative surgery. He was a brilliant operator and good teacher though he could not swallow the "germ theory," "Charlie" was most popular with the students.

Dr. Orville Menees, University of Nashville 1874, was Professor of Anatomy. He knew his subject but his lectures were dry and repetitious of page after page of

"Gray." "We learned Anatomy in the dissecting room," Dr. Wilson said.



Dr. J. M. Safford

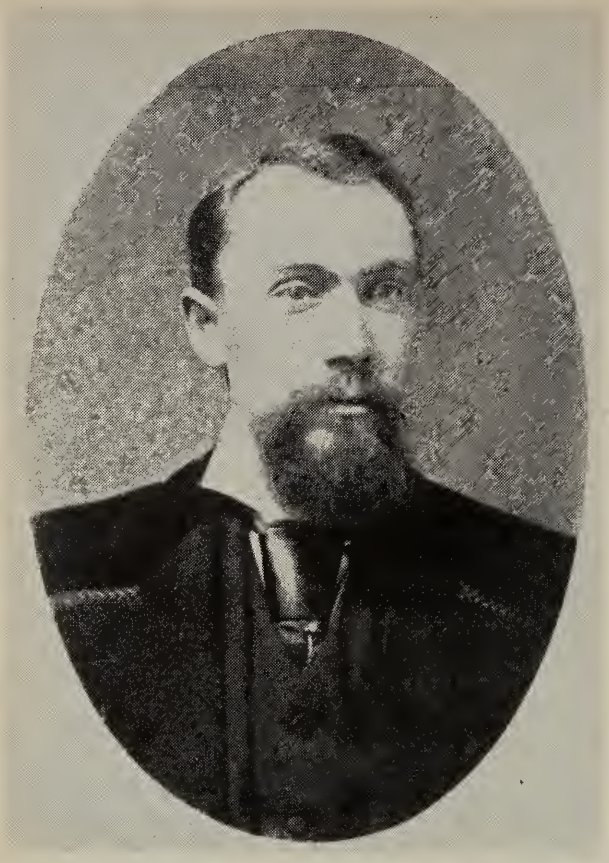


Dr. G. C. Savage
(1854-1930)
M.D., Jefferson Medical College 1878
Professor of Ophthamology, Vanderbilt University 1886-1911
(Photograph courtesy of his daughter, Dr. Kate Savage Zerfoss.)

Dr. W. G. Ewing, University of Nashville 1877, was Professor of Materia Medica. He studied medicine after spending many years as a pharmacist and Dr. Wilson said he thought that he really believed the tales of the wonderful therapeutic properties of the many drugs in the old materia medica. His lectures were technical and inclined to intensify the already prevalent tendency to "over drug."

At that time there were in Nashville 10 homeopathic physicians—most of them enjoying large patronage and their effect was to decrease the drug usage. Dr. Dicks, the last of that group, died in 1943. He observed a short while before his death that when he came to Nashville there were 10 homeopaths and only 2 undertakers and now "only one old homeopath and 40 undertakers."

Following Dr. Wilson's graduation in 1891 he described himself as a part-time intern in Dr. Douglas' 20-bed private hospital for about two years although in 1891 and 1893 he went to New York and wrote the diary notes or letters now in a large volume in our History of Medicine Room. Among others he watched McBurney operate and sent occasional critical comments to his cousin, Dr. Douglas. When he returned to Nashville he opened his office with Dr. Douglas at 206 Fifth Avenue North. He also at that time came under the influence of the senior Dr. Emmett Holt. This was what seemed to really interest him and why he became a pediatrician. He also took postgraduate refresher courses in Pediatrics at Harvard well into the 1900's. Nevertheless, for the two years while he was serving as an intern he was also a Quiz Master and Assistant to the Chair of Gynecology at Vanderbilt University and for two



Dr. Charles S. Briggs
(1851-1920)

years was a Demonstrator of Surgery. In 1895-1905 he was Professor of Anatomy at Vanderbilt University. He became a Clinical Lecturer in Pediatrics in 1897 following his return from the New York Postgraduate courses and Dr. Holt's influence and maintained this position until 1905. In 1905 as previously mentioned he became Professor of Pediatrics and finally Emeritus when Dr. Casparis came and the school was reorganized along full-time lines.

The New Vanderbilt School of Medicine

The year 1890 was a memorable one in medical education marking as it were its renaissance. During the meeting of the American Medical Association (Hunter McGuire, president) in the State Capitol at Nashville the Association of American Colleges was founded May 10, 1890. Its objectives were to curb the rapidly increasing number of medical colleges many of which were merely diploma mills. (Our W. T. Briggs was elected president of the A.M.A. in 1890). Other objectives were to improve the curriculum and to prescribe definite educational entrance requirements. At this time Nashville had three medical colleges, Memphis two, and one each in Knoxville and Chattanooga and soon one to start at Sewanee. St. Louis had 9. Although Vanderbilt was generally conceded to be among the best, in each of these schools there were but two sessions of about 20 weeks each with no attempt at graded teaching, the students hearing the same lecture both terms. There were no entrance requirements. A fair proportion of the students after the first term purchased a supply of calomel, quinine and "worm medicine" and went to the "sticks" to earn enough to return the next year.

Billy Witt and Dick Barr, both literary graduates and boyhood friends and Vanderbilt classmates of Dr. Wilson's, decided to take up medicine and wanted to study with Dr. Douglas and Dr. Wilson in their office, which was just opposite the entrance to Cain-Sloan's. They too were disgusted with the type of instruction in the medical college and they introduced Dr. Douglas to Drs. Kirkland and Dudley. They decided upon a change and persuaded the Vanderbilt Board of Trust to build a new medical school on the corner of Fifth and Elm Streets. Drs. Douglas, Savage and Price undertook to form the faculty. Dr. Douglas, in spite of twenty years feud with Duncan Eve, shook hands with him and persuaded him to head the surgery and then they induced John A. Witherspoon to take the Chair of Medicine. Thus began the present Medical Department of Vanderbilt, with high school entrance requirements, four year graded courses and written examinations. On this faculty selected were three future presidents of the American Medical Association. The other two schools, University of Nashville and University of Tennessee, also were forced to make many improvements.

In 1909 the American Medical Association finally decided to take action upon the rapidly increasing number of medical colleges. The A.M.A. committee selected one in each district to continue and Vanderbilt was their choice for this district. This determined the action of the General Education Board with its original endowment well de-

scribed in Dr. Mims' "History of Vanderbilt." It meant a new school and Vanderbilt was on the map.

Dr. Wilson was convinced that most of the improvements in medical education have been due to the efforts of the full-time "hospital" men who have done much to make medicine more of a science than of an art. In the old days he stated when the medical colleges were run by practitioners (often with selfish motives) they looked for new ideas from Central Europe but now with full-time faculty as well as the distinguished part-time faculty who were interested in teaching there was a "full supply at home."

Dr. Wilson contemplated as to what we had lost and he concluded that it was accuracy of observation. He concluded that "the intern carries a stethescope to avoid being mistaken for an orderly." "Doctors depend slavishly upon gadgets." "Lost is that priceless ingredient of human trust and confidence; a feeling of relief the moment the doctor 'who knows your constitution' walks into the sick room and takes control." This he thought had been lost or diluted by dividing the patient between the specialists. He had a fear that they were educating a lot of "big game hunters." He meant by this that after seven years of study of medicine in hospitals the young doctor's experience was chiefly with severe illness—hospital cases which were most interesting but which require special studies with gadgets and it is with reluctance that he is forced to take care of the simple ailments of the "outdoor clinic."

Finally in an address on the subject which he gave to Vanderbilt Medical students in 1955 when he was 85 he said, "I only hope that time will be as good to you as it has been to me. After sixty years in practice, most of which has been without income taxes, traffic lights or such, I have no regrets in my choice of my vocation and I just hope that you will have as smooth sailing as I have had."

* * *

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STAFF CONFERENCE

City of Memphis Hospital*
Parathyroid Adenoma

DR. HARWELL WILSON: Gentlemen, the first patient will be presented by Dr. Still.

DR. EUGENE STILL: This lady, 51 years of age, is a known rheumatoid arthritic for 25 years and has had a diagnosis of essential hypertension for 11 years. She was admitted to the medicine service for control of her hypertension. On initial survey as an outpatient she was found to have a serum calcium level of 6.0 Meq/L and to have delayed filling of the left kidney on IV pyelogram.

Past history revealed a pathologic fracture of the left tibia 18 months before admission. Pathology diagnosis at the time of surgical repair was benign bone cyst consistent with rheumatoid arthritis. At the time of this admission the patient's arthritis was being controlled with 7.5 mg prednisone per day.

Pertinent physical findings were BP 210/130 in a very obese Negro woman. There was mild proptosis and a fullness of the left lobe of the thyroid gland. The extremities revealed severe rheumatic arthritic changes in the hands, shoulders and left elbow. There was 1+ pretibial edema bilaterally.

During her hospital evaluation numerous x-ray studies for malignant disease were negative. Hand x-rays showed extensive demineralization consistent with rheumatoid arthritis. Long bone survey for metastatic disease was negative.

Repeat intravenous pyelogram revealed right nephrocalcinosis. (Fig. 1)

Serum calcium levels were 5, 7, 6.1, 4.2, 6.0 Meq/L, and serum phosphorus levels were 2.8, 2.9 mg. BUN was 28 mg, 100ml, TSP was 7.2 gm., and the albumen fraction was 3.5 gm./100 ml. PBI was 4 mcg and a selenium scan was negative.

DR. WILSON: Dr. Still, what are the normals in our laboratory for calcium and phosphorus?

DR. STILL: Normal calcium values in this laboratory are 4.5 to 5.5 Meq/L. Normal phosphorus levels are 2.0 to 5.0 mg. per 100 ml.

DR. WILSON: Thank you, Dr. Still. What is your impression at the present time as the most likely diagnosis in this patient?

DR. STILL: I think the most likely diagnosis at this time is a parathyroid adenoma.

DR WILSON: Actually, the best reason for suspecting a parathyroid adenoma is the abnormal finding of calcium and phosphorus plus the fact that this patient does have nephrocalcinosis. I believe it has been pointed out that although she has had an extensive survey of the bones we have no characteristic changes in either long bones or skull which would suggest parathyroid adenoma. Dr. Painter, would you agree with this?



FIG. 1. Nephrocalcinosis of left kidney.

DR. MAX PAINTER: Yes, I would agree with this. I think the bone x-rays have been of little help especially since this patient has rheumatoid arthritis which has caused characteristic radiologic changes that obscured the usual findings of parathyroid adenoma.

DR. WILSON: Dr. Roger Sherman is the responsible attending surgeon. Dr. Sherman, would you like to make further comments regarding your evaluation of this patient?

DR. ROGER SHERMAN: I think the evidence points pretty clearly to primary hyperparathyroidism in this patient. X-rays of the lamina dura were impossible as she is edentulous. It is also of interest that she has maintained elevated serum calcium levels despite daily prednisone medication for

*From the Department of Surgery, University of Tennessee, Memphis, Tenn.

her arthritis. One would expect the serum calcium to fall with steroid administration if the elevation were due to sarcoidosis, carcinomatosis or multiple myeloma. Fall in serum calcium levels after steroid administration however is not always the case in hyperparathyroidism. One other point is that this patient has no evidence of tumor of the breast, lung or kidney which may on occasion produce a parathyroid hormone-like substance.

DR. WILSON: Thank you, Dr. Sherman. I believe all of us would agree from the presentation which has been given that the patient deserves an exploration of the neck. We are all quite familiar with the fact that parathyroid adenoma can be quite difficult to demonstrate at times. In certain instances the tumor is obvious, in other instances it is very small and may be exceedingly difficult to demonstrate. Interest has been raised recently in the use of toluidine blue being given intravenously in carefully controlled amounts with an idea of staining the parathyroid tissue blue so as to make it more readily recognized should it be involved by a tumor. Dr. Fenwick Chappell has had personal experience with a rather spectacular case where the toluidine blue was used to demonstrate, I believe, a parathyroid adenoma present in the mediastinum. Dr. Chappell, would you comment for the benefit of all of us on your experience with this method, and I would especially like for you to say something about the safety of the method because it has been mentioned that cardiac arrhythmias may follow the rapid injection of this dye.

DR. FENWICK CHAPPELL: Dr. Wilson, the case you refer to was a 51 year old man who had clinical hyperparathyroidism and had previously had a negative neck exploration approximately one year before the exploration at which time we used the toluidine blue. The dose that we selected was in the range of 5 mg. per kg. of body weight and was given over a period of approximately 45 minutes to an hour, diluted to approximately 150 ml. in normal saline. Experimental work has indicated a definite toxicity from rapid injection of this material as manifested by cardiac arrhythmias and in at least one clinical case there was reported a cardiac arrest which might have been attributed to the toluidine blue. In our case we did use a cardiac monitor and were unable to find the adenoma in the neck, then on opening the sternum the adenoma was very deeply stained with toluidine blue and was obvious in the superior mediastinum. Our patient did not have any toxic effects from this drug. It should be mentioned that these patients have a temporary bluish discoloration of the skin giving a cyanotic appearance which must be explained to the recovery room staff and to the relatives! This is rather transient.

DR. WILSON: Thank you, Dr. Chappell. Would you mention again the dosages considered to be safe and also tell us just how much toluidine blue your patient received.

DR. CHAPPELL: We had expected to use up to 10 mg. per kg. of body weight on the basis of animal experimental work which had been reported. Actually, we used the amount of approximately 6 mg. per kg. since we were giving this by slow intravenous drip and discontinued the drip as soon as the staining of the parathyroid tissues became apparent. Later published works indicate that it requires at least 3 mg. per kg. of this material to produce any staining and amounts in the range of 5 mg. per kg. have been considered adequate. This is prepared in a 1% solution and the calculated amount is added to a volume of from 150 to 200 ml. of isontonic saline and is administered in a slow intravenous drip, preferably with cardiac monitoring.

DR. WILSON: We have pointed out that this patient in the past has had a pathologic fracture to a bone cyst and since this patient is known to have nephrocalcinosis I think all of us would be interested in knowing a little more about this bone cyst. (Fig. 2) Dr. Cheek, would you comment on this?

DR. RICHARD CHEEK: The slides of the wall of the bone cyst have been reviewed and in retrospect no osteoclastic activity can be noted which would be compatible with hyperparathyroidism. However, with the observations of nephrocalcinosis and elevated serum calcium and depressed serum phosphorus we are suspicious that this bone cyst may be related to her hyperparathyroidism.



FIG. 2. Bone Cyst.

DR. WILSON: I believe all of us will be interested in the follow up report next week since this patient is scheduled for operation.

Grand Rounds Follow Up (One Week Later)

DR. WILSON: Dr. Painter, will you give us the follow up report on the patient presented last week with the tentative diagnosis of parathyroid adenoma?

DR. PAINTER: The patient was operated upon and the thyroid was exposed through the routine collar incision; attention was directed to exploring the parathyroids. A solution of toluidine blue was started upon exposure of the thyroid gland. The parathyroids took up the dye and it was possible to demonstrate normal parathyroid glands in the right lower pole area, the right upper pole area and the left upper pole area. The parathyroid gland in the left lower pole area was much larger than the other glands. All the glands were visualized as having a navy blue color. The size of the apparent adenoma at the left lower pole was 2 cm. in diameter. The gland was smooth in contour and was removed and sent to the Pathology Laboratory for frozen section which returned a diagnosis of parathyroid adenoma. The thyroid gland itself was grossly of nontoxic multiple nodular goiter. No thyroid tissue was removed. The incision was closed in routine fashion.

DR. WILSON: Thank you, Dr. Painter. So this patient proved to have a parathyroid adenoma located at the left lower pole of the thyroid and as Dr. Painter mentioned, toluidine blue was helpful in this particular patient in demonstrating the location of the parathyroid glands as well as the adenoma. Dr. Cheek, would you give us in more detail some information regarding the preparation and use of toluidine blue in this patient.

DR. CHEEK: Toluidine blue solution is prepared in our pharmacy as a 1% sterile solution. A calculated dose of 5 mg. per kg. of body weight was mixed with 200 ml. of normal saline for intravenous administration. A cardiac monitor was utilized and the solution was administered over a 15 to 20 minute period. The infusion was started at the time of exposure of the thyroid gland. Approximately 10 minutes was required for a parathyroid tissue to assume a satisfactory blue color. During this time the patient had a transient episode of premature venticular contractions which disappeared spontaneously.

DR. WILSON: Thank you, Dr. Cheek. This then is another patient with urinary calcinosis who was proved to have a parathyroid adenoma. The presence of urinary calcinosis associated with an elevation of serum calcium and a depression of serum phosphorus perhaps gives us the best evidence for presuming a patient has parathyroid adenoma. All of us are well aware of the contributions to surgery of the parathyroid glands which have been made by Dr. Oliver Cope. In reviewing one of his articles a few days ago, I was interested in Dr.

Cope's statement that the parathyroid glands were first described by Owen, a British zoologist and the first parathyroid gland which was described was in a rhinoceros! About the same time, Sandström, a Swedish anatomist, independently described the parathyroid gland in the rabbit. Gley, a French physiologist, 11 years later, demonstrated that rabbits would have tetany after removal of the thyroid glands. It remained, however, for MacCallum in this country to demonstrate experimentally the relationship between the tetany and the serum calcium. The discovery of the diseases of the parathyroid glands came about somewhat later. Von Recklinghausen described the multiple bone cysts, which disease bears his name, and Erdheim who made so many contributions to bone pathology began to link Von Rekclinghausen's disease with changes in the parathyroid glands. In this country the studies regarding further understanding of the parathyroid diseases came more from physiologic study than from the pathologic studies. Collip demonstrated that when an extract of parathyroid glands was injected into the experimental animal, the serum calcium rose and the serum phosphorus tended to fall. I think it is always interesting when we see a patient with a relatively unusual condition, such as this patient who was operated upon and treated in now what seems to be a more or less routine fashion, to pause briefly and reflect upon the careful clinical observations, experimental physiology studies and pathologic studies which make possible our routine successful treatment of such an entity.

DR. WILSON: Tell us about any changes which may have occurred in the patient's serum calcium and phosphorus since operation.

DR. CHEEK: This patient had two determinations of serum calcium during her postoperative follow up which were 4.4 and 4.0 Meq/L. These determinations represented a return to normal where they had previously been abnormal.

DR. WILSON: This patient should be greatly benefited by the removal of this parathyroid adenoma.

* * *

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From the Executive Director
E. Ballentine

TMA MEDICAL DIGEST

News of Interest to Doctors in Tennessee

HIGHLIGHTS OF BOARD OF TRUSTEES ACTIONS

MANY ISSUES CONSIDERED AT BOARD'S THIRD QUARTER MEETING . . . The TMA Board of Trustees, at its third quarter meeting held in Nashville on July 27, acted upon a number of matters on the Board's agenda . . . The Board officially approved that the 1972 annual meeting will be held in Gatlinburg on the dates of April 12-13-14-15 . . . Received as information a report from the division coordinators of activities of TMA's Committees and reports from members of the staff outlining projects and activities being conducted.

* * * * *

UTILIZATION COMMITTEES . . . Since a major problem confronting physicians is the administration of utilization review, the existing system and function of utilization committees at the county society level was reviewed by TMA President, Dr. Francis Cole. He stated that the present method is not working satisfactorily, particularly in some counties where committees had not functioned with any consistency . . . Over-utilization and over-charging are unethical and that ethics is the first stage of abuse before it becomes a legal matter . . . Therefore peer review and utilization control are ethical considerations and should come within the province of the TMA Council. Dr. Cole presented a plan of action to revise the utilization review system and the functions of the utilization committees. It was recommended that the committees function on a district council level with the Councilor being a member of each committee . . . The plan in detail has been submitted to presidents and secretaries of the county medical societies of the state. The plan calls for ten district committees rather than in each county medical society.

* * * * *

PLANNING AND DEVELOPMENT COMMITTEE REPORTS . . . A detailed report and recommendation from the Board's Committee on Planning and Development was submitted. The main recommendation included changing the Association's five divisions into five Commissions, realigning and redefining the duties of additional standing committees and discontinuing some of the present standing committees . . . Recommended that a standing Committee on Constitution and By-Laws be established . . . The five commissions as recommended would be: Commission on Scientific Services; Commission on Legislation and Governmental Medical Affairs; Commission on Health Services and Socio-Economics; Commission on Communications and Public Service, and Commission on Medical Education. Under these five major commissions, the standing and special committees would be enumerated . . . The Board approved the recommendations and directed that the necessary amendments to the By-Laws be prepared and presented for consideration at the October meeting of the Board. If approved by the Board, the new amendments will be presented to the House of Delegates in its 1970 session.

* * * * *

BOARD PLANS VISITS WITH COUNTY MEDICAL SOCIETIES . . . A motion was adopted wherein county medical societies will be asked that if the societies so desire, a member of the Board of Trustees, or an Officer, will meet with the county society to present and discuss matters before the TMA . . .

The Board heard a lengthy report from the new Commissioner of Public Health, Dr. Eugene W. Fowinkle. In addition to the Medical Care Advisory Committee for Medicaid, Dr. Fowinkle suggested a smaller committee of physicians to work with him on the medical aspects of the Medicaid program. He outlined a number of problems and issues being considered. The Executive Committee of the Board will compose a small advisory committee to meet with Dr. Fowinkle on an informal basis.

* * * * *

ENLARGEMENT OF TMA HEADQUARTERS . . . The Board authorized the Planning and Development Committee to proceed with the selection of an architect and plans for the addition to the TMA Headquarters building. The Planning Committee reported that zoning difficulties have arisen and efforts are being made to obtain a variance to relieve the stringent restrictions on parking contained in the zoning regulations.

* * * * *

LIABILITY INSURANCE . . . Dr. Satterfield, Chairman of the TMA Insurance Committee, reported that the Committee had been investigating ways to find solutions to the problem of increasing premiums for liability coverage. It was reported that the most attractive way seemed to be a package plan of liability insurance with other types of general insurance. By grouping, savings of up to 25% minimum could be realized. The committee is continuing to study the matter . . . In other action, the TMA President made a lengthy report on a number of matters in which he had been involved during the quarter. These included guidelines for reimbursement of services rendered to patients in teaching hospitals . . . Incroachment by chiropractors in the practice of medicine, approval of Blue Shield Plans, and over-utilization procedures.

* * * * *

OTHER ACTIONS . . . Officially endorsed the Mid-Cumberland Comprehensive Health Planning Council as the recognized planning council for this region . . . Heard a report from the Regional Medical Library, consisting of 12 medical school libraries. Recommended that TMA participate in the local advisory committee at each resource library and recommended the appointment of Dr. Edmund W. Benz, Nashville, to serve as TMA's Representative on the Advisory Committee . . . Adopted a motion that Dr. R. H. Hutcheson be commended by TMA and appreciation expressed for his dedicated service to medicine and the people of Tennessee. The Board will present a resolution to the House of Delegates next April calling for the presentation of a plaque to Dr. Hutcheson . . . Approved the second quarter financial statement of operations of the Association . . . Determined that the Fourth Quarter Board Meeting will be held in Knoxville on October 12 . . . Authorized the Executive Director, with approval of the Editor, to negotiate a new printing contract for the Journal in order to reduce cost . . . Approved and recommended to the AMA, the name of Dr. Julian C. Lentz, Jr., Maryville, for consideration of appointment to the AMA's Council on Rural Health . . . Reappointed Dr. R. H. Kampmeier, Editor of the TMA Journal for an additional three year term.

* * * * *

PROFESSIONAL CORPORATIONS . . . The Internal Revenue Service has announced that it is conceding that organizations of doctors, lawyers, and other professional people organized under state professional association acts will, generally, be treated as corporations for tax purposes. This was a signal victory for doctors, lawyers and other professional people organized under state professional association acts. In the past two years, 12 court decisions have shaken the IRS position. Despite IRS surrender on tax treatment of professional corporations, many attorneys advised against incorporation of one or two man practices. They cite initial cost of incorporating, need for constant attention to red tape inherent in a corporation, problems arising through corporations when a physician member dies.

Public Service

Communications Legislation

Hadley Williams, Public Service Director

MEDICAID TO BEGIN OCTOBER 1 . . . Tennessee's Medicaid program will begin October 1, 1969 as previously announced. Untold man hours have been spent by state officials as well as by members of various committees attempting to mold a workable program. Every TMA member received a letter last month from the president, Dr. Francis H. Cole, outlining the progress. The necessity for physicians to sign participation agreements mailed in July has been eliminated. Complete instructions and basic regulations regarding the Tennessee Medicaid program are being incorporated into a "provider manual" which will be mailed to all physicians by the State in September. TMA members on the Medicaid Advisory Committee — Drs. Julian C. Lentz, Jr. of Maryville, James R. Royal of Chattanooga, Tom E. Nesbitt and Luthur A. Beazley, Jr. of Nashville and Oscar M. McCallum of Henderson — have attended every meeting of the committee which has attempted to help develop regulations for all segments of the program. The President and members of the TMA Board of Trustees Executive Committee have also consulted with state officials regarding the program. Equitable Life Assurance Society, the state's fiscal intermediary for payment of physicians under Medicaid, will conduct a series of meetings in every area of the state during September in an effort to explain the program to physicians and their employees. Members and their aides are urged to attend the meeting nearest their home in order to fully understand the procedures established to implement the program.

* * * * *

MEDICAID MEETINGS SCHEDULED . . . The following meeting dates, sites and times have been arranged by Equitable Life Assurance Society for the purpose of explaining to physicians and their employees the regulations regarding reimbursement procedures that will be followed under Tennessee's Medicaid program:

DATE	CITY	TIME	PLACE
Tuesday, Sept. 16	Morristown	7:30-9:30 P.M.	Holiday Inn
	Clarksville	7:30-9:30 "	Hudson Health Center
	Dyersburg	7:30-9:30 "	Volunteer Motor Lodge
Wednesday, Sept. 17	Kingsport	7:30-9:30 "	Holiday Inn
	Cleveland	7:30-9:30 "	Chalet Motor Court
	Murfreesboro	7:30-9:30 "	Jackson Motel
Thursday, Sept. 18	Knoxville	3:00-5:00 "	Knox Academy Auditorium
		7:30-9:30 "	Knox Academy Auditorium
	Columbia	7:30-9:30 "	Holiday Inn
	Jackson	7:30-9:30 "	Lambuth College Union Building
Tuesday, Sept. 23	Oak Ridge	7:30-9:30 "	The Marine Weather Vane
	Cookeville	7:30-9:30 "	Rice Motor Inn
	Paris	7:30-9:30 "	City Hall

Wednesday, Sept. 24	Johnson City	7:30-9:30	"	McArthur Hall-Memorial Hospital
	Tullahoma	7:30-9:30	"	Commodore Motor Inn
	Memphis	3:00-5:00	"	U.T. Pathology Auditorium
		7:30-9:30	"	U.T. Pathology Auditorium
Thursday, Sept. 25	Chattanooga	3:00-5:00	"	Interstate Life Auditorium
		7:30-9:30	"	Interstate Life Auditorium
	Nashville	3:00-5:00	"	Lentz Health Center
		7:30-9:30	"	Lentz Health Center
Wednesday, Oct.1	*Memphis	7:30-9:30	"	U.T. Pathology Auditorium

* Emphasis on Regulations pertaining to Hospital Based physicians, (Radiologists, Pathologists, etc.).

* * * * *

TENNESSEAN RE-ELECTED AMA SECRETARY-TREASURER . . . Dr. Alvin J. Ingram of Memphis was re-elected secretary-treasurer of the American Medical Association and secretary of the AMA Board of Trustees following the July annual convention in New York City. Dr. Ingram was first named to these positions in 1968 and is currently serving his sixth year as a member of the AMA Board. He is the only Tennessee physician ever elected a trustee.

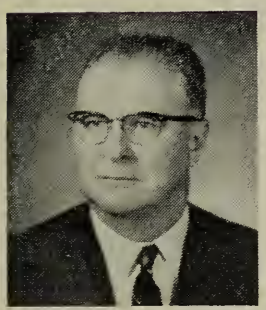
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MEDICAL ASSISTANTS SCHEDULE SEMINAR . . . The Medical Assistants Society of Tennessee will conduct an educational seminar in Memphis, September 20-21 at the Holiday Inn-Rivermont. Dr. Francis H. Cole, TMA President, will participate on the program and will discuss the Tennessee Medicaid program. Among the other topics to be discussed will be papers on HR 10 (Keogh) Plans, Business Management, and Certification of the Medical Assistant. Physicians are urged to encourage their medical assistants to join their local chapter and to participate in these educational programs designed to better equip physicians' assistants to render honest, loyal and more efficient service to the profession and to the public which they serve. A pamphlet explaining the aims and goals of the Medical Assistants Society of Tennessee was mailed to every TMA member recently.

* * * * *

JCAH TO URGE PHYSICIAN MEMBERSHIP ON HOSPITAL GOVERNING BOARDS . . . The Joint Commission on Accreditation of Hospitals has accepted "for field testing" an interpretation that members of medical staffs should be included on hospital governing boards. The interpretation reads: "physicians of the medical staff, where legally permissible, shall be eligible for and should be included in the membership of the hospital governing body in the same manner as are all other knowledgeable and effective individuals. Other physicians also should be considered as eligible for membership on the governing body." JCAH said the word <u>should</u> reflects a desirable but not mandatory practice that produces compliance with the standard and does not eliminate alternative or innovative courses of action. TMA and AMA have repeatedly reaffirmed policy recommending physician representation on hospital governing boards.

President's Page



FRANCIS H. COLE

Although many pages have been written and many words spoken, the complicated Medicaid program is difficult to forecast, and the position of the Tennessee Medical Association is misunderstood. Medical association—state, national, and local—hold unanimously and uniformly to the concept of usual, customary, and reasonable fees for professional services, and to the principle that an independent professional practitioner retains the right to set his own fees for service within that framework. The Tennessee Medical Association endorses these principles, and the officers of Tennessee Medical Association have never swerved from this position in all negotiations with the State agencies responsible for Medicaid.

By Federal regulation the maximum allowable fee to physicians under Medicaid has been restricted to the 75th percentile. By State regulation this maximum allowable has been even more stringently limited to 50% of the 75th percentile. This means that 75 of each 100 procedures will be paid for at 50% of the billing, and the 25 most costly will be reimbursed at less than 50%. This is an administrative decision, based by the State government on the real fear that money will give out before the year is gone. T.M.A. did not agree to this. T.M.A. was not asked to agree to this. T.M.A. has received the written assurance that joint review will be carried out at 3 or 4 months after the program starts, to determine whether such a low fee can justifiably be continued.

T.M.A. has not committed one single physician to participate in this program. The total effort of T.M.A. throughout has been to preserve the right of a patient to choose his doctor and of the doctor to choose whether to treat the patient. T.M.A. made strong representations in opposition to the proposed "Agreement of Participation" because it did bind a physician to an open-ended contract. This was withdrawn. No individual, committee, or Board of T.M.A. has any right to bargain with any other agents. We are not a union. Each physician can decide whether he will treat a patient during a particular episode of illness, under the conditions imposed by the agencies regulating Medicaid. T.M.A. is exercising its influence to make those conditions as tolerable as possible to physicians, and as satisfactory as possible to patients.

Almost no one likes this law, and all of us would make changes, if we had the opportunity. However physicians did not oppose the bill in hearings before it was passed, and this is now the only way to devote significant public money to the health care of the indigent sick. The eligibles under this program are the poor people of our State who are the 8% who must depend on public assistance for lodging, food and clothing. If a physician prefers to care for these patients at no charge, he can submit a voucher of zero. His patient will then be eligible for drugs, hospitalization and the other services necessary in health care.

Each physician must make his own decision. I personally hope that physicians will try out the program, and that they will submit usual and customary charges to the State so that information can be accumulated to prove whether this plan for health care for poor people is feasible. The choice for each physician is his and his alone.

Sincerely,

Francis H. Cole, M.D.

President

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SEPTEMBER, 1969

EDITORIAL

AMA RECOGNITION AWARD FOR CONTINUING EDUCATION

Readers of this page have been acquainted of the TMA's interest in stimulating active participation of its members in continuing education.[1]

The TMA House of Delegates passed the following Resolution at its meeting in April of this year:

... RESOLVED, that it is the conviction of the Committee on Continuing Medical Education that continuing self-education is imperative in the promulgation of good medical practice, and be it further

RESOLVED, that this Committee, believing that motivation is basic to self-education, recommends that the Board of Trustees and House of Delegates urge each member of the Tennessee Medical Association to become active in continuing education and self-examination, and be it further

RESOLVED, that in the development of such a program this committee will have as its function to act as a liaison and catalyst to local medical societies and the medical staffs of community hospitals. The Committee will seek the cooperation of the Regional Medical Programs to assist them in the promotion of the continuing education program."

As has been pointed out by many who have had interest in continuing education, there is no set pattern of continuing education for physicians since the pattern must fit the circumstances in point of time, the state of medical knowledge, the place and circumstances where the doctor practices and the individual inclinations of the student. The gamut of these activities is summarized in the Vollan Report of the AMA Council on Medical Education, 1967.

"The physician adds to his knowledge by: (1) Reading of the medical literature; (2) consultations with colleagues; (3) hospital staff meetings and conferences; (4) local, state and national meetings of general and specialty medical societies; (5) formal postgraduate courses; and (6) regional hospital medical school educational programs. It is apparent that formal courses are only a part of the educationally significant programs in this field."

Properly, *reading* heads the list—upon this everyone is agreed. The printed word is without peer and will not be threatened in the foreseeable future by any new technical "hardware." Its value lies in that it is always at hand for immediate retrieval—when the visiting consultant has gone, the TV screen wiped clean and the video tape or film has been mailed back. (While in practice in a mining camp I knew a colleague who would not be disturbed from 6 to 6:30 every evening—only a woman in labor or an injured person took precedence over those 30 minutes reserved to reading —a total of four and a half 40-hour weeks annually! He was a man of professional competence.) Technology has enhanced reading by extending a ready and rapid reference system. Already it has been shown to be feasible to relay to a doctor's desk a print-out of literature from a distant library in a matter of minutes. This will become a practicality in coming years.

Formal postgraduate courses continue to offer additions to the doctor's knowledge so long as he can sit still and stay awake. The interesting trend of recent years has been an increasing number of such courses offered by hospitals. In 1962-63, 55% of courses were offered at medical schools, 9%

at hospitals; in 1969-70 the ratio is 44% by medical schools, 22% by hospitals.

It is with respect to item 3 in the Vollan Report that the TMA Committee hopes to fulfill "its function to act as a liaison and catalyst to local medical societies and the medical staffs of community hospital" as stated in the Resolution above. This formula has developed into one of general acceptance in the United States, Canada and England.

The following quotation is from an editorial in the JAMA on Motivation:

"Of late, interest has been growing in relating the physician's continuing education more to his daily needs. Some leaders in continuing medical education have urged that the community hospital be made the logical place for most efforts in this field. It is pointed out that the community hospital is where most of the problems for the physician exist, where he has the need for help in solving these problems, and where his continuing education is actually part of his daily practice of medicine. Regional medical programs have found these reasons to be logical and are laying plans to use the community hospital as a focal point for the future.

"A fringe benefit arising from the use of the community hospital (as a principal place for continuing medical education) is that the physician who heretofore has been unable to get away can now partake of continuing education as if it were his daily bread. It is not foolish to prophesy that more physicians will participate, if continuing education is woven into the structure of their daily medical activities.

"It remains for continuing medical education at community hospitals to be given a more definite recognizable form, a system of physician education which can be nourished with the latest knowledge and skill from the medical school and medical specialty society system. —we will see far greater participation in continuing medical education if such education is identified and recognized as part of the activity already on the scene and in use at the community hospital."[2]

The long recognized importance and role of *self-education* is emphasized in a second JAMA Editorial on the state medical associations' place in continuing education:

"It was felt that increased motivation of the physician-student would occur if he could participate more actively in his continuing education programs. He would need to participate in subject matter that would satisfy his needs and desires professionally. The voluntary aspect of continuing medical education also appeared to be important to the conference members. It was felt the profession could and should generate its own efforts to maintain and improve the quality of health care by individual physicians and that, in the long run, the patient himself would be the one most likely to benefit from relevant participative continuing medical education."[3]

In 1821, Robert Graves of Dublin contrasted the method of bedside teaching in Germany medical schools to those of the United Kingdom, Italy and France. He observed that, "according to the German method, no regular clinical lectures are necessary, as the pupil becomes accurately acquainted with the physician's views of each case, . . ." But other than in Meath Hospital in Dublin no changes occurred elsewhere until Osler introduced teaching on the wards of the University Hospital in Philadelphia in the mid-1880's. He spoke of this as "The natural method of teaching, the student begins with the patient, continues with the patient, and ends his studies with the patient, . . ." He took the German method of bedside teaching with him to Johns Hopkins some years later. The reorganization of our medical schools following the Flexner Report embraced the influence of Johns Hopkins as a prototype, and bedside teaching forced didactic teaching out of the window.

The worth of these basic principles of medical education, both undergraduate and graduate, have long passed the point of being questioned. The lag is in applying these concepts to continuing education awaited a "bedside" now provided by the community hospital. Aware of the barrenness of the didactic approach necessary to medical societies, Osler[4] in 1903 outlined methods which would bring a "bedside" flavor to meetings of county societies.

The need for a realistic approach to the development of a program of continuing education at "home base" will shortly become more evident.

A Report of the Board of Trustees and the AMA Council on Health Manpower to the AMA House of Delegates reviewed the topic of relicensure and continuing education. It recommended that relicensure not be considered at present but "that various methods of maintaining quality medical care through peer review evaluation and augmentation of continuing education be extended and improved." The Board also awarded *Physician's Recognition Awards* to

5,639 out of a total of 9,041 applicants. These are the first *Awards* for having completed three years of continuing education, namely have completed a three-year residency in an acceptable program. This month the AMA plans to mail to all of you beyond the residency category an instruction booklet and application blank if you wish to qualify for such an Award in three year qualifying periods.

To accumulate the required hours to qualify for the *Physician's Recognition Award,* a program of continuing education in a local setting will be extremely helpful in lieu of needing to accumulate them by attendance at meetings or formal courses away from home.

The TMA Committee on Continuing Education invites physician groups to request consultation in ititiating educational programs. R.H.K.

1. Editorial: State Medical Associations—Their Role in Continuing Education, J. Tenn. Med. Assn. 61: 1224, 1968.

2. Editorial: Motivation, JAMA 209:765, 1969

3. Editorial: The State Medical Association and Continuing Medical Education, JAMA 209:766, 1969.

4. Osler, William: Essay "On the Educational Value of the Medical Society."

IN MEMORIAM

Stern, Neuton S., Memphis. Died July 14, 1969, Age 79. Graduate of Harvard Medical School, Boston, 1915. Member of Memphis-Shelby County Medical Society.

Widdis, Patrick B., Newbern. Died July 7, 1969, Age 52. Graduate of University of Tennessee College of Medicine, 1942. Member of Northwest Tennessee Academy of Medicine.

Myers, Luther Q., Maryville. Died April 6, 1969, Age 49. Graduate of University of Pennsylvania School of Medicine, Philadelphia, 1945. Member of Blount County Medical Society.

PROGRAMS AND NEWS OF MEDICAL SOCIETIES

Nashville Academy of Medicine Davidson County Medical Society

Dr. Donald Louria, chairman of the Public Health and Preventive Medicine Department at the New Jersey College of Medicine and Dentistry, spoke on "Drug Abuse" at the meeting of the Academy on September 9th. Dr. Louria is author of "The Drug Scene." The meeting was held in the auditorium of Baptist Hospital and a dinner and business session of the Academy preceded Dr. Louria's address.



New Members

The Journal takes the opportunity to welcome these new Tennessee Medical Association members.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY
Molly Elaine Rogers Seal, M.D., Chattanooga

KNOXVILLE ACADEMY OF MEDICINE
Morris N. Dalton, M.D., Knoxville
Luis G. Maldonado, M.D., Knoxville
Terresa Stallworth, M.D., Knoxville

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY
Roy J. Barnes, M.D., Memphis
Joseph C. Battaile, M.D., Memphis
Raymond J. Fioranelli, M.D., Memphis
Charles W. Gross, M.D., Memphis
Richard T. Kelly, M.D., Memphis
John E. Robinson, Jr., M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE
Robert M. Johnson, M.D., Nashville
H. Newton Lovvorn, M.D., Nashville
James R. Moyers, M.D., Nashville
Edgar Allen Proctor, M.D., Nashville
Joseph A. Pryor, M.D., Nashville
Frank M. Rembert, M.D., Nashville
Howard E. Rosen, M.D., Nashville
David D. Thombs, M.D., Nashville
Jan van Eys, M.D., Nashville
John S. Zelenik, M.D., Nashville

ROANE-ANDERSON COUNTY MEDICAL SOCIETY
James E. DeFoe, M.D., Rockford
Elliott E. Kaebnick, M.D., Oak Ridge
David G. Stanley, M.D., Oak Ridge

SULLIVAN-JOHNSON COUNTY MEDICAL SOCIETY
C. Richard Owen, M.D., Kingsport

WEST TENNESSEE CONSOLIDATED MEDICAL ASSEMBLY
Armando F. Delgado, M.D., Western State

Knoxville Academy of Medicine

A business meeting of the Academy was held on August 12th to discuss and act on revisions to their Constitution and By-Laws as proposed by the Special Committee and approved by the Judicial Council. There was no scientific presentation planned for the meeting in order to allow adequate time for discussion and action on the proposed revisions.

TMA Executive Director Recognized

Mr. Jack Ballentine has been made an *Affiliate Member* of the American Medical Association.

The Judicial Council of the AMA recommended at the Annual Meeting in July, that recognition be given "those individuals who have obtained distinction in their fields of endeavor" by election as an *Affiliate Member* of the AMA.

Mr. Ballentine has served as a member and as chairman of the Advisory Committee to the Communications Division of the AMA. In this capacity he brought to the AMA Administrative Staff much from his long experience "in the field" of administration of state medical associations. The TMA membership is pleased that his contributions have received this well deserved recognition.

NATIONAL NEWS

The Month in Washington
(From Washington Office, AMA)

The American Medical Association questioned whether the Department of Health, Education and Welfare has the authority to issue its recent regulation limiting physicians' fees under Medicaid.

"We question whether the authority granted by the Congress embraces the promulgation of this regulation," Dr. Ernest B. Howard, executive vice president of the AMA, said in a letter to HEW. "This regulation appears to reverse the roles of state and federal government established in the law itself."

The regulation limits most physicians' fees to the 75th percentile of the customary charge—the maximum customary fee of 75 percent of the physicians in the area.

After offering HEW the cooperation of the AMA in its efforts to contain rising medicaid costs, Dr. Howard pointed out that the "comprehensive" care goal of the program could not be achieved "without substantial funding, both state and federal."

"Moreover, it has always been recognized that the intent of Title XIX (Medicaid) when adopted, was to dissolve any barriers which existed between medical care available to the medically indigent and other citizens," the AMA statement said. "It also recognized that payment to physicians participating in the government program should be on the basis of reasonable charges, i.e., usual charges of the physician within the customary range of charges for similar services in the community, so as to assure a broad range of participation by physicians in the program and eliminate one of the obstacles to the care of patients on the same level as that provided other persons in the community. This was essentially the approach taken in the January 25, 1969, regulations concerning "Reasonable Charges," in which "Customary charges which are reasonable" was established as the upper limit for payment for non-institutional services. We believe that the January 25th pronouncement more accurately comports with the Congressional intent expressed in Section 1903 (a) (30) of the Medicaid law, than does the new regulation. . . .

"In departing from this earlier standard, by establishing arbitrary limits on payments to individual practitioners, it should be recognized that the July 1 regulations may again raise a barrier to providing private care to the medically indigent.

"There can be no question that any fee abuses in the program, whether by individual practitioners or other providers, must be ferreted out and eliminated. On the other hand, the true effect of the proposed regulations must be kept in proper perspective, since physicians' fees represent only approximately 11% of the costs of the Medicaid program. Consequently, if the basic concern is with the total costs of the program, the remedy in our opinion, is not through regulations which restrict physicians' charges."

TENNESSEE VALLEY MEDICAL ASSEMBLY

(Sponsored by the Chattanooga and Hamilton County Medical Society, Inc.)

MEMORIAL AUDITORIUM, CHATTANOOGA TENNESSEE

Monday, October 13, and Tuesday, October 14, 1969

17TH ANNUAL ASSEMBLY

Monday, October 13, 1969

7:30 REGISTRATION BEGINS

9:00 ALTON OCHSNER, M.D., President, Alton Ochsner Medical Fdn., New Orleans, La., *"The Present Status of the Treatment of Cancer of the Lung"*

9:30 N. C. HIGHTOWER, M.D., Dir. Scott-White Mem. Hospital, Temple, Texas, *"Esophageal Motor Disorders of Clinical Importance"*

10:00-10:30 INTERMISSION—REVIEW EXHIBITS

10:30 DANIEL W. ELLIOTT, M.D., Clin. Prof. of Surg., Univ. of Pittsburgh, Pittsburgh, Pa., *"New Methods in the Diagnosis of Pancreatic Disease"*

11:00 NORMAN E. LEVAN, M.D., Prof. of Medicine, Chrmn., Sect. of Dermatology, Univ. of So. Calif., Los Angeles, Calif., *"Cutaneous Manifestations of (or Clues to) Diabetes Mellitus"*

11:30 L. W. DIGGS, M.D., Goodman Prof. of Medicine, Univ. of Tennessee, Memphis, Tenn., *"Practical Points in the Diagnosis of Hemorrhagic Disease"*

NOON Luncheon Symposiums—$4.00
(Limited to 85 physicians per symposium)
(Tickets must be obtained prior to assembly)

Symposium No. 1 "SOME ASPECTS OF OPERABLE CANCER"
Guest Panelists: G. A. HALLENBECK, M.D.
ALTON OCHSNER, M.D.
Moderator: FRANK B. GRAHAM, M.D.

Symposium No. 2 "HEART DISEASE, PAST, PRESENT AND FUTURE"
Guest Panelists: PAUL DUDLEY WHITE, M.D.
HELEN B. TAUSSIG, M.D.
SOL SHERRY, M.D.
Moderator: DAVID P. MCCALLIE, M.D.

2:00 G. A. HALLENBECK, M.D., Dept. of Surg., Univ. of Ala. Med. Center, Birmingham, Ala., (Prof. Emeritus, Mayo Clinic), *"Tissue Transplantation: Principles and Current Status"*

2:30 HELEN B. TAUSSIG, M.D., Prof. Emeritus of Pediatrics, Johns Hopkins Hosp., Baltimore, Md., *"Long Time Observations on the Tetralogy of Fallot"*

3:00-3:30 INTERMISSION—REVIEW EXHIBITS

3:30 J. B. LYNCH, M.D., Assoc. Prof. of Surg. (Plastic and Maxillofacial), Univ. of Texas Medical Branch, Galveston, Texas, *"Current Concepts of Burn Management"*

4:00 PAUL DUDLEY WHITE, M.D., Emeritus Clin. Prof. of Medicine, Harvard Univ. Med. School, Boston, Mass., *"How Long Should We Live"?*

Tuesday, October 14, 1969

8:00 REGISTRATION

9:30 SOL SHERRY, M.D., Prof. and Chrmn., Dept. of Medicine, Temple Univ., Philadelphia, Pa., *"New Developments with Antithrombotic Agents"*

10:00 MAYNARD I. SHAPIRO, M.D., Pres., American Academy of General Practice, Kansas City, Mo., *"The New Family Physician"*

10:30 INTERMISSION—REVIEW EXHIBITS

11:00 ROBERT B. WILSON, M.D., Prof. Clin. Obstetrics and Gynecology, and Head of Sect., Obstetrics and Gynecology, Mayo Clinic, Rochester, Minn., *"Endocrine Contraception"*

11:30 F. E. GREIFENSTEIN, M.D., Prof. and Chrmn., Div. of Anesthesiology, Univ. of Arkansas, Little Rock, Ark., *"Anesthesia in the Geriatric Patient"*

NOON Luncheon Symposiums—$4.00
(Limited to 85 physicians per symposium)
(Tickets must be obtained prior to assembly)

Symposium No. 3 "SKIN DISEASES IN THE GENERAL PRACTITIONER'S OFFICE"
Guest Panelist: NORMAN E. LEVAN, M.D.
Moderator: CLARENCE SHAW, M.D.

Symposium No. 4 "NEW DEVELOPMENTS IN THE DIAGNOSIS AND TREATMENT OF LEUKEMIA"
Guest Panelists: L. W. DIGGS, M.D.
RICHARD P. SCHMIDT, M.D.
Moderator: JOHN W. ADAMS, JR., M.D.

2:00 LUIGI MASTROIANNI, JR., M.D., Prof. and Chrmn., Dept. of Obstetrics and Gynecology, Univ. of Pennsylvania, Philadelphia, Pa., *"Oogenesis and Ovulation: Some Practical Considerations"*

2:30 RICHARD P. SCHMIDT, M.D., Assoc. Dean, Univ. of Florida College of Medicine, Gainesville, Fla., *"Profiles of Headache; Diagnosis and Treatment"*

3:00-3:30 INTERMISSION—REVIEW EXHIBITS

3:30 JACK C. HUGHSTON, M.D., Orthopaedic Surg., Columbus, Ga., and Chrmn., Comm. on Sports Medicine. Am. Acad. of Orthopaedic Surgeons, *"Knee Injuries"*

4:00 ROBERT E. WISE, M.D., Chrmn., Dept. of Diagnostic Radiology, Lahey Clinic Fdn., Boston, Mass., *"Color in Radiology"*

On the Congressional front, the medicaid law was amended to give the states some relief in fiscal difficulties arising from the program. States now have until July 1, 1977, to submit comprehensive plans of medical care for all needy persons under Medicaid. Under the original Medicaid Law, participating states had to come up with such a plan by July 1, 1975. But rising health care costs resulted in Medicaid fiscal difficulties for so many states that Congress delayed the deadline for two years and relaxed other requirements to ease the financial bind.

One of the new amendments permits states to reduce their services under Medicaid. In the past, they couldn't. But a state still cannot reduce overall Medicaid spending.

Rep. Wilbur D. Mills (D., Ark.), chairman of the House Ways and Means Committee, said the changes in the law should give states some financial relief and also give Congress time to consider what long-range revisions are desirable in Medicaid.

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President Nixon said the nation will be confronted with a "massive" crisis in health care unless government and the private sector cooperates to hold down costs and to improve the system of delivery of medical services.

He made the statement in commenting on Health, Education and Welfare Department's "Report on the Health of the Nation's Health Care System." It carried the names of both HEW Secretary Robert H. Finch and HEW Assistant Secretary for Health and Scientific Affairs Roger O. Egeberg, M.D.

"This nation is faced with a breakdown in the delivery of health care unless immediate concerted action is taken by government and the private sector," the report said. "Expansion of private and public financing for health services has created a demand for services far in excess of the capacity of our health system to respond. The result is a crippling inflation in medical costs causing vast increases in government health expenditures for little return, raising private health insurance premiums and reducing the purchasing power of the health dollar of our citizens."

The report said the medicaid program—"badly conceived and badly organized"—was a major factor in rapidly rising health care costs by attempting "to provide medical services for the poor by pushing them into the nation's already overburdened health care system without developing the capacity in the system to serve them and without building the capability in the states to manage the program."

The report also said overtaxed health resources are being used wastefully and not being expanded rapidly enough. And not enough attention is being given to preventive health care, the report said.

Two advisory groups were set up: A HEW Secretary's Task Force on Medicaid and Related Programs under co-chairman HEW Undersecretary John G. Veneman and Walter J. McNerney, president of Blue Cross, and a special industry group with David J. Mahoney, president of Norton Simon, Inc., as chairman.

Dwight L. Wilbur, M.D., then president of the American Medical Association, congratulated the Nixon Administration for taking "such a thoughtful look at the accumulated problem that has been built up in the past as a result of hurriedly enacted programs, the buildup of unattainable expectations and creation of unsound administrative operations."

"Correcting the consequences of massive disruptions and past political errors will call for the cooperation and dedication in the government and private sectors," Dr. Wilbur said. "This includes physicians, other professionals many in related fields, hospitals, government, insurance payors and many others."

Dr. Wilbur also welcomed a call by Finch and Dr. Egeberg for discipline through the profession itself of "the very few members of the medical profession who have reportedly abused the (medicare and medicaid) programs."

MEDICAL NEWS IN TENNESSEE

New Medicaid Reimbursement Formula

The July 1, 1969, regulation establishes the eventual ceiling on Medicaid reimbursement at the 75th percentile of the range of customary charges which existed on January 1, 1969. After June 30, 1970, these ceilings would be permitted to rise in relation to increases in HEW selected segments of the Consumers Price Index.

The Use of Percentiles in Establishing Ceilings on Physician Reimbursement—The percentile is not a measure of quantity, but of rank in a series. The xth percentile includes, not x percent of any amount, but x percent of the items in an ordered series.

In the regular series of one hundred numbers from 1 to 100, the 70th percentile will be number 70—including 70 percent of the numbers in the series. In the regular series of even numbers from 2 to 200, the 70th percentile will be 140, again including 70 percent of the numbers in the series. In a random series of ten ascending numbers (e.g. 3- 7- 8- 12- 19- 20- 21- 24- 30- 32) the seventh number (in this case 21) will be the 70th percentile. In a repeating series of ten numbers—2, 2, 2, 5, 5, 5, 7, 7, 10, 10—the 70th percentile will be 7, again including 70 percent of the numbers in the series.

Percentile in Payment Formulas—As used in Medicare and Medicaid, the percentile simply indicates where, in a series of charges for a service, ranged from low to high, the ceiling on payment is placed. It does *not* represent percentage of the individual physician's fee, and bears no necessary relation to the total billing.

(Example: For a certain procedure, the usual charges of ten physicians are $10, $12, $12, $14, $16, $8, $10, $10, $12, $14. In order from low to high, these charges are $8, $10, $10, $10, $12, $12, $12, $14, $14, $16. If the ceiling on payment for the procedure is set at the 70th percentile of these usual charges, the maximum payment would be $12, the seventh in the series of ten. Physicians in this group billing $12 or less would receive their full fees, whether $8, $10, or $12; physicians billing $14 or $16 would receive only $12.

The above example indicates some of the characteristics of percentile fee ceilings which have caused confusion for those unfamiliar with statistical methods. In this series, the 70th percentile is $12—but so is the 60th percentile and 50th percentile. In this particular series of charges, the ceiling is the same whichever of these three percentiles is chosen. Similarly, the 80th and 90th percentiles in this series are identical; if the ceiling were set at the 80th percentile, it would actually permit full payment of nine of the ten charges listed.

(N. B. This is an arbitrarily chosen imaginary series of charges. This particular distribution—the identity of the 20th-30th-40th, the 50th-60th-70th, and the 80th-90th percentiles—does not necessarily apply to any real series of charges. However, the tendency of professional charges for a given procedure to "bunch" at certain levels does often result in only slight variations between two distinct percentile levels.)

Further, the ten charges listed total $118. Using the 70th percentile ($12) as the ceiling, the $8 charge, the three $10 charges, and the three $12 charges would be paid in full, while $12 would be paid for each of the two $14 charges and the $16 charge, for a total of $110 or 93.2% paid of the total $118 billed. It is often possible for the percent of total billings paid to exceed significantly the percentile at which the ceiling is set.

Neither, clearly, does the percentile directly indicate what percentage of the individual bill is met. In the above series, those charging $8, $10, or $12 receive 100 percent of their fee with a 70th percentile cut-off; those charging $14 will receive 85.7%, and those charging $16 will receive 75% of the amount billed.

Mental Health Units Funded

Dr. Frank H. Luton, Commissioner of Mental Health for Tennessee, has announced that Federal staffing grants totaling $356,337 have been approved for day care centers for retarded children in 11 Tennessee counties. Total cost of the day care centers is $475,115. The State will fur-

nish $71,000 and $47,778 will come from the local sources where the centers are located.

Centers receiving the grants are: Community Care Center, Nashville; DeKalb County Day Care Center, Smithville; Team Evaluation Center, Chattanooga; Jackson Day Care Center, Jackson; Cordell Hull Economic Opportunity Center, Lafayette which includes centers in Jackson, Smith, Clay, Macon and Trousdale counties; Dawn of Hope Day Care Center, Johnson City; Orange Grove Center, Chattanooga and Clover Bottom Hospital and School, Donelson. The programs will operate at least 12 hours a day, five days a week and will contain academic, vocational and recreational components, along with training in self-help skills, self-grooming and socialization.

Mid-South Medical Center Council

Long and thoughtful study by the Mid-South Medical Center Council to devise a plan for an improved operation of the public hospitals of the City of Memphis and Shelby County has resulted in the appointment of a new Board of Hospital Trustees which will regulate both city and county hospitals. The new system, which shifts the responsibility for financing the hospitals from the city government to the county government will offer greater benefits to the sick and the indigent through expanded health services, to the University of Tennessee Medical Units through greater teaching opportunities, and to the taxpayers through efficiency of operation.

The Council was influential in bringing the interested parties together, establishing a community of agreement among the two governments, the University and the medical professions. The fifteen-member Board of Trustees was officially organized to operate the public hospitals of Memphis and Shelby County on July 22nd. Dr. B. G. Mitchell, a former president of the Memphis and Shelby County Medical Society, was named Vice Chairman of the Board and Dr. Edward W. Reed was named Secretary.

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The MMCC has been awarded a $359,000 federal grant by the U. S. Health, Education and Welfare Department, which has given recognition to the Council's activities on a nationwide basis. The money, which is to be matched by local funds, is to be spent over a period of two years and will enable the Council to more adequately cover the region geographically and to continue its work in the development of Master Planning for the Mid-South area in the field of health. The MMCC became the sixth council in the United States and the second council in the southeast United States to receive a planning grant. Organizational grants have been awarded to other planning councils.

University of Tennessee College of Medicine

Dr. Robert Crocker, formerly assistant dean for student affairs at the College of Medicine, has returned to the Department of Pathology in a full-time teaching capacity, a position he held before moving to the Dean's office several years ago. Dr. John T. Riggin, who joined the Medicine staff earlier this summer as Associate Dean for Academic Affairs, has assumed responsibility for student affairs in the College of Medicine; he also will be involved in the study and planning of curriculum revision and development.

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Dr. Alan Bisno, who recently joined the faculty as assistant professor of medicine, has received one of three national awards from the American College of Physicians as a Teaching and Research Scholar. Dr. Bisno also is acting head of the Section of Infectious Diseases. . . . Dr. Andrew Lasslo, professor and chairman of medicinal chemistry, has been appointed to the committee on regional medical library programs of the Medical Library Association. Dr. Lasslo also serves as chairman of the library science and services committee of the Memphis Regional Medical Program. . . . The American Academy of Pediatrics has appointed Dr. Sheldon B. Korones, associate professor of pediatrics, to its committee on fetus and newborn.

★

The National Cancer Institute has awarded a $74,000 grant to the University of Tennessee medical units to continue re-

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search into what effect plastics have on human tissue. Since plastics and other man-made materials are now being used as surgical and dental implants, there is consequent need to determine what long range effect they will have on animals and humans.

Vanderbilt University School of Medicine

Dr. Edward V. Staab, assistant professor of radiology at Vanderbilt Medical Center, has been selected to participate in a $450,000 research grant. Thirty-four other medical scientists from throughout the country will also participate. Announcement of the one-year grant and the participants was made by the National Research Council. The grant is being given by the James Picker Foundation which provides grants to medical scientists for research and training in radiology and nuclear medicine.

The program is administered by the committee on radiology in the National Research Council's Division of Medical Sciences. Dr. Staab will conduct a study of cerebral spinal fluid flow patterns. Working with him on the study will be Richard E. Johnson, Ph.D., as instructor in radiology; Joseph H. Allen, M.D., associate professor of radiology, and William F. Meacham, M.D., clinical professor of neurosurgery.

Three important appointments have been announced. Dr. Paul E. Teschan has been named director of the Tennessee Mid-South Regional Medical Program and Associate Professor of Urology in the department of surgery; Dr. Bert W. O'Malley has been appointed to fill the school's new Chair in Reproductive Physiology and Family Planning; and Dr. Gerald Fenichel has been appointed as chairman of the new department of neurology.

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Le Bonheur Names New Coordinator

Dr. David H. James, Jr., has been appointed to the new post of medical coordinator of Le Bonheur Children's Hospital. This appointment is in line with the hospital's plans for future development of a children's medical center in Memphis. The new center, to be ready in two to six years, will have Le Bonheur as its nucleus and will be a conglomerate of existing children's health services. Dr. James, assistant professor of pediatrics at the College of Medicine, will work with the student and resident training program at Le Bonheur, also with nursing service in upgrading procedures in the emergency room and other areas.

Meharry Medical College

An anonymous donor has given $1 million to Meharry Medical College's school of medicine to endow a scholarship program and a chair in internal medicine. Dean Ralph J. Cazort has stated that $500,000 of the money will establish an endowed scholarship program to assist students in the master of medical science degree program. The other half-million will finance an endowed chair in internal medicine on the condition that Meharry match it with $250,000 to provide a $750,000 endowment.

Woman's Auxiliary News

The Woman's Auxiliary to the Tennessee Medical Association today received an award of merit for its outstanding efforts in the American Medical Association Education and Research Foundation program for 1968-69. The presentation was made during the Auxiliary's 46th annual convention being held at the Waldorf-Astoria Hotel.

The Tennessee Auxiliary had the largest contribution per capita of any state in the Southern Region.

(The national Auxiliary's contribution to AMA-ERF totaled $428,875.77, which will be given to the Institute for Biomedical Research and to medical schools for unrestricted use.)

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Tennessee Auxiliary president for 1968-69 was Mrs. A. L. Jenkins, Knoxville. Mrs. J. Ralph Rice, Nashville, served as president-elect, and Mrs. Rodney Field, Memphis, was AMA-ERF chairman.

The Woman's Auxiliary to the Chattanooga & Hamilton County Medical Society, also received an award of merit for its outstanding efforts. The Chattanooga & Hamilton County, Auxiliary had the largest contribution in the 201 to 500 member category.

PERSONAL NEWS

Governor Buford Ellington has appointed **Dr. Dorothy Brown** of Nashville to the State Commission on Youth Guidance. Dr. Brown is professor of clinical surgery at Meharry Medical College and a former representative to the Tennessee General Assembly. The Governor also announced the reappointment of **Dr. Thomas Frist,** Nashville, to a six-year term on the Commission on Aging. **Dr. Joseph W. Johnson, Jr.,** Chattanooga, was reappointed to an eight-year term on the Board of Trustees of the State Department of Mental Health; and **Dr. Morse Kochtitzky,** Nashville, **Dr. J. Kelley Avery,** Union City, and **Dr. John W. Adams, Jr.,** Chattanooga, were reappointed to three-year posts on the Public Health Council.

Dr. James H. Smith has begun practice in internal medicine with **Dr. James R. Noonan** in Dyersburg. He will also be associated with **Drs. W. I. Thornton, W. O. Murray, J. D. Connell,** and **Dr. William F. Craddock** in the Dyersburg Medical Building.

Drs. Joe Miller, Armistead Nelson, Brian T. Shorney and **Robert L. Bomar** participated as speakers in a recent conference on "Cancer and Pastoral Care." The program presented in Nashville, was sponsored by the American Cancer Society and the Tennessee Council of Churches.

Dr. A. T. Hicks has been re-elected chief of staff at Benton County General Hospital. **Dr. John H. Overall** is vice-chief of staff and **Dr. R. L. Horton** will serve as Secretary. All are located in Camden.

Dr. Dana Nance, formerly of Oak Ridge and a member of TMA since 1946, has moved to Atlanta, Georgia to enter a new phase in the medical profession that of operating a hospital emergency room under separate contract. Dr. Nance and three other physicians have formed a partnership to furnish emergency room service on a 24-hour basis, with an experienced physician on duty at all times at Kennestone Hospital in Marietta, Georgia.

Dr. John O. House, Chattanooga, has been appointed plant physician at the Volunteer Army Ammunition Plant by Atlas Chemical Industries, Inc.

Dr. S. G. McNeeley has been selected as Norris citizen of the year for 1969, and received a standing ovation from more than 500 persons who attended the Norris Day festivities to honor him. Dr. John H. Saffold, Chairman of the TMA Board of Trustees addressed the group at the award ceremony.

The newly elected officers of the professional staff of the Woods Memorial Hospital District are: **Dr. Thomas W. Williams,** Etowah, chief of staff; **Dr. W. K. Frye,** Vice Chief of Staff, and **Dr. Helen Richards,** Secretary.

Dr. Robert A. Moore, Gallatin, has been re-elected to active membership in the American Academy of General Practice.

Dr. Greer Ricketson, Nashville, was recently named to the Board of Trustees of the National Wildlife Federation's Endowment Corporation. The Endowment Corporaton was founded in 1956 and has as its main function to support the National Wildlife Federation, which has a membership of approximately two and one-half million persons.

Dr. O. K. Smith has resumed his practice of medicine in Martin after completing a tour of duty with the U.S. Air Force. His office is located in the Martin Medical Center. He has also been named chief of staff at Volunteer General Hospital.

Dr. Kenneth G. Ross has been elected chief of the medical staff of Henry County General Hospital. He will serve until July 1, 1970. Others elected were **Dr. I. H. Jones,** vice chief, and **Dr. D. M. Norman,** secretary.

Dr. Oscar S. Hauk, 85, director of the forensic psychiatry division of the Tennessee Department of Mental Health, retired July 3rd after 39 years of service. He is a former superintendent of Eastern State Psychiatric Hospital and of Central State Hospital.

Dr. Robert Carver Bone has resumed his practice in Lebanon following completion of his residency in pediatrics at Vanderbilt University Hospital. Dr. Bone's office will be located in the McFarland Hospital Clinic and will specialize in the diseases and care of infants, children and adolescents. In addition to duties on the McFarland staff, he will care for newborn and sick children at Vanderbilt, Parkview, Baptist and St. Thomas Hospitals in Nashville. He holds an appointment on the Vanderbilt Medical Faculty and will teach in two subspecialty clinics each week.

Dr. Robert C. Barker has been elected president of the medical staff at St. Mary's Hospital in Humboldt. **Dr. James H. Crenshaw** is vice-president and **Dr. James D. Rozzell,** secretary.

Dr. J. M. Hays, general practitioner in Oak Ridge for seventeen years, has accepted a psychiatric residency at the University of Virginia Medical Center in Charlottesville, Virginia.

Dr. Guy C. Richardson, Bristol physician and leader in Veterans of Foreign Wars activities since 1946 was honored on July 26th with the presentation of the national Distinguished Service Award, the fifth presentation of the award since its inception 71 years ago.

ANNOUNCEMENTS

Calendar of Meetings, 1969

State

Oct. 13-14	Tennessee Valley Medical Assembly, Memorial Auditorium, Chattanooga

National

Nov. 6-8	American Society of Cytology, Palmer House, Chicago
Nov. 10-13	Southern Medical Association, Atlanta, Georgia
Nov. 10-14	American College of Preventive Medicine, Philadelphia
Nov. 13-15	American Thyroid Association, Drake Hotel, Chicago
Nov. 13-15	Southern Thoracic Surgical Association, Mayflower Hotel, Washington, D. C.
Nov. 13-18	American Heart Association, Memorial Auditorium, Dallas
Nov. 19-22	Western Surgical Association, Statler Hilton Hotel, Dallas
Nov. 30-Dec. 3	American Medical Association (Clinical Convention) Denver

Important Questionnaire to Be Mailed to All Physicians in Tennessee

A questionnaire to bring up-to-date the official record of every physician in the United States, whether AMA members or not, will be mailed to you at an early date. The purpose of the questionnaire is to have correct and current information in the AMA Master Records. The information from this record will be utilized to describe the distribution of physicians and to analyze health manpower. This is an updating of statistics gathered in 1968 and you are urged to answer every question on the basis of your current activities and to return the completed questionnaire to the American Medical Association at your earliest possible convenience.

New CMA Relative Value Studies to Be Published in September

A new edition of the *Relative Value Studies* will be published by the California Medical Association in September. The *Relative Value Studies,* or "*RVS*" is a complete listing of procedures performed by physicians. There are also unit values which indicate the relationship of values of services to each other. The *RVS* will become effective for usage in California April 1, 1970. It is designed to assist doctors, health insurance carriers, consumers and business to identify procedures which physicians perform. Furthermore, the edition serves as a guide to understanding the basis for charges. However, this is not a fee schedule.

The first edition of the *RVS* was published in 1956. Its concept has been adopted by other state medical societies and applied to voluntary health insurance and government-financed programs nationwide. Revised by the California Medical Association's Committee on *RVS,* the 1969 edition is the culmination of more than two years of intensive study and consultation with experts in the health care profession.

"The content of this edition (of the *RVS*) reflects as completely as possible the manner in which medicine is practiced in California at this time," William H. Thompson, M.D., Chairman of the CMA Committee on *RVS,* stated.

Major changes are: (1) expansion of the coding system from four to five digits; (2) inclusion of approximately 50 percent more procedures than in the 1964 edition; (3) introduction of the concept of "modifiers"; (4) structuring of each *RVS* section unit values in such a way as to make them applicable to only that individual section; and (5) reorganization of the musculoskeletal system in the Surgery Section entirely according to body system.

A system of two-digit "modifier" codes for physicians was introduced so they may easily indicate circumstances which may affect the fee charged —either up or down—for a specific procedure.

There are a number of changes in specific sections. For example, in the medicine section, physician visits have been further refined to describe more accurately their relative complexity. New subsections have been added to describe services provided in extended care facilities and in hospital emergency rooms. Also included are many diagnostic services which were formerly included in "Surgery" (such as procedures relating to the eye, ear and the cardiovascular system).

Another major revision is the listing of all vascular injections for radiology in the "Surgery" section only, with cross-reference appearing in "Radiology." The "Laboratory" section, now called "Pathology," was reorganized according to the type of procedure performed rather than by the source of the specimen.

More than 20 medical specialty subcommittees and a number of individual consultants—comprising nearly 100 physicians—and representatives of the insurance industry, component medical societies and computerized billing services were consulted "in an attempt to make this edition as useful as possible," Dr. Thompson has explained.

The format of the book has been improved with an edge index to make it easier to find and turn to particular sections. The subject index will be more detailed in its listing of procedures. Copies of the revised *RVS,* at $3.50 each (including tax), will be available from Six-Ninety-Three Sutter Publications, Inc., 693 Sutter Street, San Francisco 94102. Prepaid orders will be filled beginning October 1.

Southeastern Chapter of the Society of Nuclear Medicine

The Southeastern Chapter of the Society of Nuclear Medicine will hold its tenth annual scientific meeting on October 23-25 at the Sheraton Nashville Hotel, 920 Broad Street, Nashville, Tennessee. The chapter invites participation of all interested persons. The program will include panel discussions, contributed scientific papers, and teaching sessions on the applications of nuclear

medicine. The instructional program will be accredited by the American Academy of General Practice.

For information regarding participation in the program, contact: Richard L. Witcofski, Ph.D., Department of Radiology, Bowman Gray School of Medicine, Winston Salem, North Carolina, 27103.

For other information, including registration, contact: Robert H. Rohrer, Ph.D., Department of Physics, Emory University, Atlanta, Georgia, 30322.

Society of Nuclear Medicine— Southeastern Chapter

The tenth annual meeting will be held at the Sheraton Motor Hotel, Nashville, October 22-25. The program will cover the whole spectrum of the use of radioactive isotopes in diagnostic and research studies by authorities in their uses. For further information, contact A. B. Brill, Vanderbilt University School of Medicine, Nashville, Tennessee.

TMA THE VIEWING BOX

Postgraduate Education, The Need for Continuing Medical Education

Rosa Lee Nemir, M.D.

It is axiomatic that the physician must be forever a student. The last few decades have greatly increased the physician's need to keep abreast of scientific advances. This he must achieve without neglecting his practice in the effort. The newer pressure on today's physician for postgraduate education is due to many factors, first of which is the knowledge explosion in the scientific world both in depth and breadth with often a resultant knowledge obsolescence; secondly, the introduction of new specialties in medicine with increasing fragmentation of old specialities; a third factor is the use of new basic tools and methods for the study of health and disease, and a fourth is the new organization and socio-economic approaches to the delivery of medical care. These latter changes require study and knowledge of the systems used in order to permit the physician to become an effective member of the medical team.

There are two further emerging factors requiring improved, streamlined postgraduate educational techniques. The public is receiving accurate, condensed, dramatized medical information almost as soon as it is obtainable. This awareness by the public requires and demands an equally informed physician prepared to apply the newest findings or at least to understand them. Consider the story of the transplanters. A patient asks what organs may be transplanted, what are the limitations, what are the effects on both donor and recipient, etc., etc.

The second new pressure for expanded postgraduate education relates to the changed curriculum in medical schools in the last few years. Medical education at the undergraduate and graduate levels is greatly altered both by time spent and the content of required learning experiences. In my own Medical School, New York University, for example, the courses in the senior year for the first time this year are almost entirely electives. Similar freedom of choice is found elsewhere. The current tendency is to graduate more doctors in shorter time and to permit specialization earlier in their careers. Postgraduate education will be greatly needed for these younger physicians to round out their experiences and fill certain unpredicted needs. In addition, many will have second thoughts about their choice of specialty and will require educational redirection and training.

I need not add the final obvious argument for continued education: namely, the stimulus it affords to a naturally inquiring mind, the pleasure of shared experiences with colleagues, and the resultant ego satisfaction. All these are worthwhile values in themselves.

Time limitation does not permit the development of each of these points. We are acutely aware of the vast store of new sci-

This paper was presented at the Annual Meeting of the American Medical Women's Association, Boston, Mass., Dec. 7, 1968.

entific knowledge; the increased number of medical journals alone serves as evidence of that. It is reported that each year about 2 million pages of medical literature and about 170,000 medical abstracts are published. New techniques also have revolutionized medicine. The introduction of tissue culture for the study of viruses only a short time ago, spearheaded by Enders and others, unbelievably accelerated the entire field of virology. New diseases, new names for old disease syndromes, and new vaccines sprang up over night.

From the not so new and broad specialties of geriatrics and adolescent medicine to the highly specialized techniques of monitoring, catheterizations, angiographies and genetic counselling, an endless list may be made of specialties and techniques that were not in the medical curriculum of physicians graduating a few decades ago.

The doctor must acquire all this new information *promptly* for good patient care. It must be well taught with economy of effort and time for the already overburdened and tired physician.

How is this education to be done?

Where is it needed the most?

These two questions, involving methodology and the study of educational media on the one hand and geographic areas and subject content on the other, require continued research in medical education with attention to the analysis of results. There should be provision for a feedback from the experimental models.

Granted success with the development of a postgraduate program, what are its limitations and requirements? The physician is limited by his inability to leave his professional responsibilities at will, by his inadequate information as to what he most needs to learn and where to obtain the information, by financial responsibilities and restrictions whether it be those due to loss of time from professional work or those due to the expense incurred in obtaining the education, and finally by the constant struggle with himself or herself as to the neglect of home and family. Time allocated for family fun is often encroached upon. The education plans are limited and handicapped by a lack of faculty dedicated to postgraduate teaching. It must be emphasized that few professional people are paid adequately for postgraduate teaching. In general, the teachers are chosen from the faculty of a medical school and have a primary responsibility to an undergraduate school, or they are busy and successful practitioners or research workers who give additional time to teaching other physicians.

There is a need for extensive study of new educational methods. The standard recognized sources for postgraduate learning are reading material, scientific meetings and postgraduate courses. More and more abbreviated abstracts and review articles, including books published yearly on advances in the specialties, are being used. Scientific meetings are both general and specialized, national and local or regional. A wide variety of postgraduate courses have been used, concentrated short periods, extended and interrupted periods, but without proper analysis to determine major effectiveness. Recently taped records and open and closed circuit television have been used. The Medical College of Albany 13 years ago began the nation's first two-way radio broadcasting for physicians conveniently timed for the lunch hour. Its purpose was to bring educators, researchers and innovators in medicine into direct contact with the practicing physicians, permitting the latter to ask questions, present problems and receive answers by radio.

Research is in progress to computerize current information for immediate use by the physician. What expenses will this entail to both the producer and consumer? Can the physician who needs it most afford it?

The multiple basis for urging the medical educators to meet the needs for a continuing education has been developed briefly. Some suggestions to meet this enlarged educational program may be summarized.

1. Attention to the media chosen and the method of delivery of this medical education should be made by recurring review which utilizes educational research methods to evaluate the new teaching means and modify the old methods.

2. Attention to the choice of a faculty

for developing these educational projects should have high priority.

Both 1 and 2 could best be implemented by the development of a National Academy or similar body dedicated to postgraduate education, other than the existing committees in national organizations such as AMA. Funds for the development of postgraduate faculties are essential if postgraduate education is to attract creative, resourceful, well qualified persons.

3. It is essential to explore ways in which practicing physicians may be released from practice without neglecting their patients while pursuing postgraduate education. One method suggested is the interchange between practicing physicians in a group with a senior resident or similarly highly trained recent graduate physician. This should be of mutual advantage, on the one hand to the young physician about to enter practice, and on the other, to the physician seeking newer knowledge. Other avenues of subsidiary aids for the doctor's continuing education should be studied.

4. Consideration must be given to the doctor's family life, often long neglected. This problem applies to both men and women physicians, perhaps even more to the men. Cannot nursery, kindergarten and child care be provided for children of physicians attending meetings, thus permitting a semi-vacation for the family? AMWA might well lead the way by exploring, through questionnaires among its members, the usefulness of such a project for its next annual meeting. Certainly for the meeting in Puerto Rico, a vacation for the doctor's family could result.

5. Sizable fellowship grants should be available for the physicians who wish to study for long periods of time and possibly to supplement expenses incurred by younger or needy physicians for short time study.

Finally and most important is the recognition of the need for new models of teaching at the postgraduate level. Interest, research and finances are needed. I doubt that any system of compulsory periods of study or periodic examinations for relicensing physicians need ever be used provided there are adequate programs and means for facilitating continued learning.

A growing awareness of the issues discussed is already apparent among educators. Some recent conferences have covered some of these problems. One in Boston, the Summer Study Conference by Cope, Zaccharis, published in 1965, and called "Medical Education Reconsidered" devotes one section to postgraduate education. Another, the Rochester Conference, published in 1967, gives some discussions on the need for continuing medical education. In a different vein, the California Medical Association has given $5000 grants to each of six medical schools in California for the study of audio-visual aids. These efforts are only a beginning in the direction we should go in supporting and participating in the development of good postgraduate educational models. (From the *J.A.M.W.A.—March 1969)*

* * *

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Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville, Tennessee 37203.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

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These tumors often provide symptoms which will be helpful in early diagnosis if the index of suspicion is high.

Intraspinal Tumors in Children with An Illustrative Case*

CHARLES W. EMERSON, JR., M.D.,† Nashville, Tenn.

The reasons for directing attention to intraspinal tumors in children are several. The relative rarity of the entity would perhaps, in itself, be some indication for presentation, though this alone would not warrant it. Some authors state that intraspinal tumors in children are one-fifth as common as intracranial tumors in the same age group; however, the ratio of intraspinal versus intracranial tumors may be as high as one to twenty as reported by Rand and Rand.[1] Three more pertinent reasons for focusing attention in this area are: (1) Peripheral orthopedic manifestations, e.g., torticollis, scoliosis and limp may divert attention away from the spinal cord. (2) The average time between onset of symptoms and diagnosis of intraspinal tumor, reported by da Roza[2] was 16 months, the time ranging from six days to fourteen years. Because of this long time lapse, return of spinal cord function following decompression was universally poor. (3) There are relatively early radiographic signs of intraspinal tumor which should be reviewed.

This paper consists of a review of portions of the literature relating to intraspinal tumors, with the emphases being on awareness of the lesion, differential diagnoses, radiographic manifestations, irradiation effects on the growing spine, and the necessity for continued orthopedic followup. Our case illustrates the aforementioned facets of intraspinal tumors in children.

A 3 year old Negro boy was brought to Vanderbilt University Outpatient Clinic with the chief complaint of weakness of the right lower extremity, first observed by the mother 8 months before the examination. The past history was significant in that the mother had noticed a slight curvature of the spine at approximately one year of age. The child had had all of his immunizations for his age, including poliomyelitis vaccine.

The physical examination revealed a 3 year old boy in no apparent distress. He had a limp with an obvious footdrop and external rotation of the entire right lower extremity. There was a mild scoliosis with convexity of the lumbar curve to the left and dorsal curve to the right. The knee jerks were not elicited, the ankle jerks were 1+ and equal and a Babinski reflex was not present. There was no definite sensory level, but there was a questionable area of decreased sensation over the dorsum of the foot. The right lower extremity was cooler than the left. Specific muscle testing of the right lower extremity revealed the quadriceps, hamstring, gastrocnemius and soleus to be good; hip adductors, internal and external rotators of the hip and toe extensors and flexors were fair; the gluteus maximum, sartorius, iliopsoas, hip abductors and peroneals were poor; and there was only a trace of function of the anterior and posterior tibial muscles.

Differential Diagnosis

Many entities must be considered in the differential diagnosis. Six of the most common erroneous diagnoses in a series of 115 cases of intraspinal tumors in children reported by Tachdjian and Matson[3] were: poliomyelitis, meningocele and spina bifida, trauma of the spine, torticollis (congenital), idiopathic scoliosis and appendicitis. Poliomyelitis was ruled out in our case by the positive immunization history and lack of other corroborative history. Appropriate x-rays and physical examination ruled out the possibility of meningocele and spina bi-

*Read at the meeting of the Tennessee Orthopaedic Society, April 10, 1969, Gatlinburg, Tenn.

†From the Department of Orthopedic Surgery-Vanderbilt Medical Center, Nashville, Tennessee.

fida. Though there is frequently a history of associated incidental trauma of the spine in intraspinal tumors in children, there was none in our case. Congenital torticollis is many times confused with orthopedic manifestations of intraspinal tumor, but this is usually associated with tumors in the cervical spine. In the older age group, idiopathic scoliosis may be the diagnosis, because muscle weakness produces a curvature of the spine from an apparent unknown etiology. Careful perusal of plane AP films of the entire spine assists one in making this differential diagnosis. Intraspinal tumor in the lower thoracic level can produce radicular pain to the abdominal quadrants which may mimic appendicitis. A loculated appendiceal abscess was a prime consideration in our case. The differentiation here, of course, can be made by careful clinical evaluation and appropriate laboratory studies. Other entities which are to be considered in the differential diagnosis are meningitis, tuberculous or pyogenic spondylitis, spastic cerebral palsy, enuresis, muscular dystrophy, peripheral neuritis, brachial plexus paralysis, brain tumor, Guillain-Barré (infectious polyneuritis), diastematomyelia and Scheurmann's disease (juvenile epiphysitis or kyphosis).

Most Frequent Signs and Symptoms

The most frequent initial complaint in the series of 115 cases of intraspinal tumors, was weakness of the lower extremities with some variety of limp.[3] This occurred in 56 out of 115 cases. Pain in the low back, trunk, or extremities is also a frequent complaint, but this symptom was not present in our particular case. Urinary incontinence also occurred in a high percentage of these patients, but was not a prime feature in our young patient. He did develop dysuria several days after admission to the hospital. The most common physical finding in this same series of 115 cases was a pathologic reflex. The second most common was spastic paralysis and the third most common, which was manifested in our case, was flaccid paralysis of the muscles of the lower extremities. Many times the sensory level can be established, although it was not determined in our patient. Sensory examination in this age group of patients leaves much to be desired. There were only 3 instances of vasomotor changes in this age group but in our patient the right lower extremity was definitely cooler than the left.

X-Ray Findings in Intraspinal Tumors

There are several x-ray evidences of intraspinal tumors. (1) There may be a change in the size or contour or erosion of the inner borders of the pedicles, all of which are more common in children than in adults. (2) Flatness of the inner aspect of the pedicle per se is not felt to be conclusive, but when associated with widening of the spinal canal it is of great significance. (3) Concavity of the inner borders of the pedicles above the T-7 level is secondary to a pathologic process, commonly intraspinal tumor. (4) There also may be widening of the foramina or loss of the normal cervical or lumbar lordosis. (5) Scoliosis may occur with any of the aforementioned.

Hospital Course of Case

The patient was admitted to Vanderbilt University Hospital on Dec. 11, 1968 and pediatric, neurologic, general surgical, and finally neurosurgical consultations were obtained. The multiplicity of consultations reiterates the difficulty in arriving at the correct diagnosis. Plane films of the entire spine, intravenous pyelogram, and finally a myelogram were the radiographic studies obtained in this child. Plane films revealed approximately a 15 degree scoliosis involving the lower dorsal and upper lumbar spine. After critical review of the intravenous pyelogram and plane films, widening of the interpediculate spaces of T-11 through L-1 was noted on both. Interpediculate distance increases normally from the C-2 to the C-4 level, decreases to the T-5 or T-6 level, and then again progressively increases to the maximum distance at the L-5 level. A complete graph of normal maximal interpediculate measurements for all age groups has been devised by Simril.[4] This chart depicts the normal range of interpediculate measurements of the thoracic and lumbar spine from age one day to adulthood. The chart may be helpful in evaluating any suspicious case. It is thought that the variation of one millimeter is not significant.

After the plane films and IVP study had revealed the widening of the interpediculate spaces, a myelogram was done to confirm the diagnosis of intraspinal tumor. A lumbar puncture was carefully done with removal of only a minimal amount of cerebrospinal fluid because of the nature of the lesion. A complete or partial block, as was demonstrated at the L-1 level, usually produces xanthochromic cerebrospinal fluid.

In our case the color of the fluid was not recorded. (Barrows, Hunter and Baulser[5] thought that the composition of xanthochromic cerebrospinal fluid was a combination of oxyhemoglobin, methhemoglobin and/or bilirubin. Some authors believe that the xanthochromia is either due to decomposition of the blood or to increased protein content secondary to transudation from the tumor.)

A neurosurgical consultation was obtained and a decompression laminectomy and partial tumor excision were accomplished. At the time of operation the initial gross appearance of the intramedullary tumor was characteristic of an ependymoma; however, the pathologic diagnosis revealed a grade II astrocytoma.

After the primary wound healing, cobalt therapy was begun. The patient received 5000 rads over 43 days. Following operation and during the course of cobalt therapy, the patient's right ankle was supported in a posterior splint because of the tendency to develop an equinus deformity. The patient was started on gradual ambulation, first with parental assistance and then with a walker. The patient had a benign postoperative course and was discharged on Jan. 20, 1969, after a total of 6 weeks in the hospital. He was followed closely as an outpatient in the physical therapy department.

Irradiation Effect on the Growing Spine

It is important that we realize the irradiation effect on the growing spine. Neuhauser, Whittenburg and Cohen[6] reported the irradiation effects on the growing spine in 35 patients who were treated primarily for retroperitoneal or paravertebral neoplasms. Their conclusions were: (1) 1000 r failed to produce gross permanent deformity of the spine irrespective of age. (2) 1000 to 2000 r produced only minor growth disturbance in children over 2 years of age. (3) More than 2000 r caused growth disturbance irrespective of age, but the disturbance was worse under 2 years of age. (4) Scoliosis was rarely produced if the spine received uniform irradiation by the true AP ports. (5) Nonspecific growth retardation and irregularity of ossification of epiphyseal cartilage were the most significant changes. Our patient received 5000 r over a 43 day period (which was more than the usual time span) by way of true AP ports, in an effort to minimize irradiation effect.

Factors Contributing to Deformity

Scoliosis and Kyphosis may result from: extensive laminectomy, irradiation (less significant in kyphosis), muscle weakness, lack of external support, and recurrence of tumor with progressive increase of intraspinal mass.

Patients must therefore, be followed closely.

Follow Up of Case

An AP film of the spine in our patient three and one-half months following treatment showed no progression of the scoliosis. In the lateral film, however, a kyphotic deformity has occurred and will require a back brace in the near future.

Muscle testing three and one-half months post operatively and post-irradiation revealed that the muscle strength had improved either one whole grade or a plus in the same grade.

The child has continued to do well, and is walking with a short leg brace on the right. One minor complication was that of skin breakdown in the area of incision secondary to the irradiation. It is very difficult to prognosticate regarding this young patient's future course. However, one reported case of grade II astrocytoma survived 14 years following laminectomy and irradiation.[3]

Conclusions

(1) The orthopedist, because of orthopedic manifestations of intraspinal tumors, is the initial specialty contact in a large percentage of cases.

(2) One's index of suspicion of intraspinal tumors should be extremely high in a child who has peripheral motor weakness associated with recurrent trunk, back or extremity pain. If a child complains of recurrent pain in a consistent location, we should pay attention, for this symptom is usually significant.

(3) Plane AP films of the entire spine should be obtained and carefully evaluated for widening of the spinal canal and increased interpediculate distance in children with the aforementioned signs and symptoms. When indicated, a myelogram should be performed to confirm the diagnosis.

(4) With earlier diagnosis, hence earlier decompression, return of cord function will improve.

(5) The vast majority of children will require bracing following decompression and irradiation; therefore, continued follow-up is mandatory.

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* * *

ARTERIAL HYPERTENSION: The Value Of Its Early Recognition*, John Thomas, M.D., Nashville, Tenn.

Hypertension as a cause of serious morbidity and deaths far exceeds all other diseases in the third, fourth, and fifth decades of life. The exact incidence of hypertension will probably never be known; this would entail the taking of blood pressure in all individuals in this age range. However, if health screening is to be done the measurement of the blood pressure is one of the most valuable procedures. Frequently, the first time that a person knows that he has hypertension irreparable damage has been done to the heart, brain, or kidneys. In fact when hypertension becomes symptomatic there is almost always some such complication.

In talking with physicians with expertise in hypertension there is common agreement that there is a decline in the incidence of malignant hypertension, and, that this decrease is due to the early and better therapy of hypertension. The benefit of therapy is clearly determined by the study of Dr. Freis.[1]

In a recent study done by us on 242 patients with essential hypertension, cardiac enlargement was present in 54 per cent of the subjects.[2] All patients studied were Negroes admitted to the Meharry-Hubbard hospital. The percentage of cardiac enlargement is much higher than in other reported studies[3, 4] and indicates that the heart is one of the main target organs of hypertension. Early detection and adequate therapy can conceivably prevent cardiac enlargement with ensuing cardiac insufficiency. It is also probable that cerebrovascular accidents and renal impairment may likewise be prevented.

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*Review at the request of the Middle Tennessee Heart Association.

Supported in full by Public Health Service Research Grants HE 06349 and Training Grant HE 502.

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ISCHAEMIC HEART-DISEASE AS A COMPLICATION OF NEPHROTIC SYNDROME. Berylyne, G. M. and Mallick, N. P., University Department of Medicine, Manchester Royal Infirmary. The Lancet, Aug. 23, 1969.

Studied were 60 consecutive patients aged 8 to 45 years with the nephrotic symdrome seen at Manchester Royal Infirmary in the past 10 years.

Four cases of myocardial infarction, 2 of them fatal, were observed in a series of 15 patients, aged 30 to 44, with a nephrotic syndrome due to glomerulonephritis. All had a longstanding nephrotic syndrome with hyperlipaemia, and only one had hypertension. Ischaemic heart-disease is a common complication of the nephrotic syndrome, occurring with a frequency 85 times greater than in the general population of the same age-group. Every effort should be made to lower the plasma-lipid values to normal rapidly in nephrotic syndrome, and the measures should include vigorous use of steroids and immunosuppressive drugs.

The 2 patients in the fatal cases of infarction had preinfarction serum cholesterols of 530 mg. and 600 mg. per 100 ml., the 2 nonfatal patients of the cases had cholesterols of 650 mg. and 460 mg. and a case of angina on effort had a cholesterol of 340 mg. per 100 ml. (*Abstracted for the Middle Tennessee Heart Association* by H. D. Murray, M.D., Old Hickory.)

The authors describe their limited series of cases in which two valves were replaced. The survivors were improved to satisfactory functional levels. The mortality rate was no greater than the usual in similar instances.

Experiences with Double Valve Replacement*

DUNCAN A. KILLEN, M.D., HAROLD A. COLLINS, M.D., and ISABELLA S. COLLINS, M.D., Nashville, Tenn.

During the 21 month period ending March 31, 1969, replacement of two cardiac valves was attempted in 11 patients at the Vanderbilt University Medical Center. A summary of this experience is herein reported.

Results

Each patient operated upon had long-standing rheumatic valvular heart disease (Figs. 1 & 2). The aortic and mitral valves

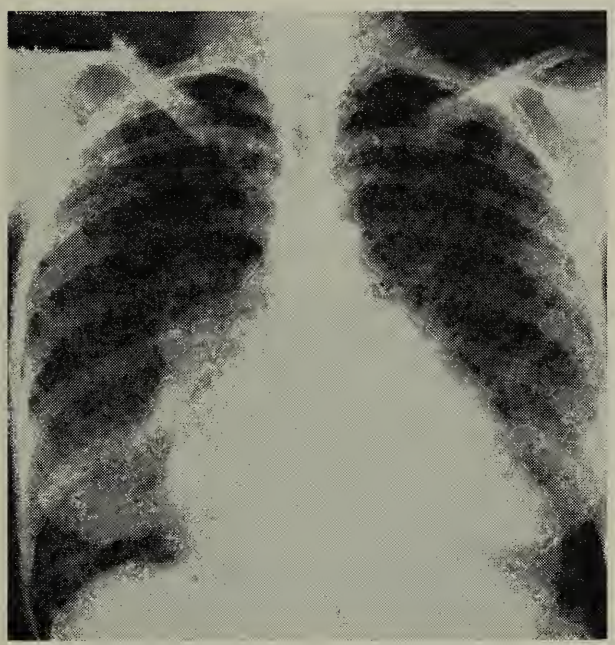


FIG. 1. Preoperative chest radiogram (patient No. 8) reveals cardiomegaly with evidence of chronic pulmonary venous congestion. Note Kerley lines in upper left lung field.

were replaced in 10 patients. In a single instance, the mitral and tricuspid valves were replaced. In 10 out of 11 patients, preoperative cardiac catheterization confirmed the presence of severe hemodynamic dysfunction of both valves. In one instance, the patient was deemed too ill to be

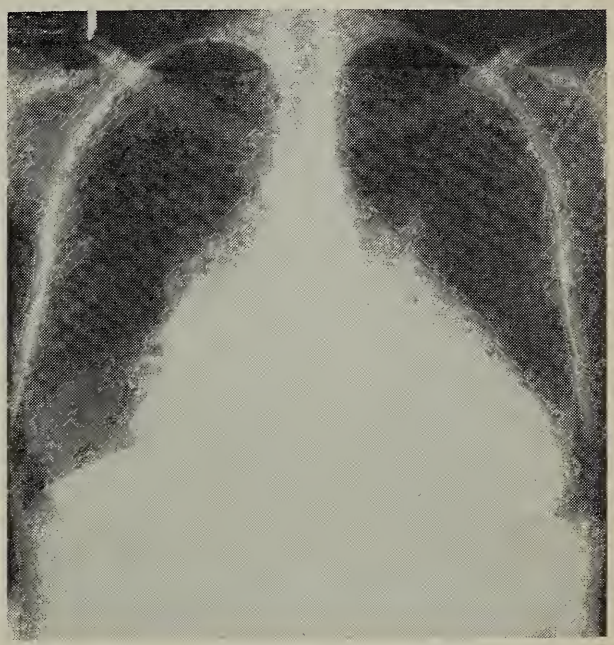


FIG. 2. Preoperative chest radiogram (patient No. 9) reveals marked cardiomegaly. There was severe hepatomegaly and massive ascites.

subjected to cardiac catheterization. Six patients were male. The ages of the patients ranged from 31 to 63 years.

Cardiopulmonary bypass was performed using a disposable bubble oxygenator (Bentley) and an ACD blood hemodilution prime. During the intracardiac portion of the operative procedure, the body temperature was held at 30 to 32°C. Coronary perfusion was performed continuously or intermittently throughout the procedure. Starr-Edwards prosthetic (ball) valves were utilized in each instance. In the last 7 patients of the series, cloth covered Starr-Edwards valves with a stellite ball were used. The duration of cardiopulmonary bypass ranged from 2 to 4 hours. The age, sex, predominant hemodynamic diagnoses, and symptomatic classification (New York Heart Association) are shown in Table 1.

Two operative deaths occurred. One fatality resulted from damage to the left coronary artery during coronary perfusion; attempted repair of the artery was unsuccess-

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Table 1

Double Valve Replacement

Patient	*Age-Sex*	*Diagnoses**	*Outcome*	*Follow-up**
1	50—M	AI & MI (IV)	Survival	21 Mo. (I)
2	56—F	AI & MS (III)	Death	
3	44—F	AS & MI (IV)	Survival	11 Mo. (I)
4	45—M	AI & MS (III)	Survival	10 Mo. (I)
5	31—M	AI & MS (IV)	Survival	12 Mo. (II)
6	63—F	AI & MI (III)	Survival	6 Mo. (II)
7	43—M	AI & MI (IV)	Survival	3 Mo. (II)
8	30—F	AI & MI (III)	Survival	2 Mo. (II)
9	36—F	MI & TI (IV)	Survival	1 Mo. (II)
10	47—M	AI & MS (IV)	Survival	1 Mo. (II)
11	31—M	AI & MI (III)	Death	

*Functional class according to the New York Heart Association

ful. Death occurred suddenly on the third post-operative day in a patient who ostensibly was doing well. The cause of death is unknown (no autopsy was performed). There were severe nonfatal complications in 7 patients during the first 30 postoperative days (Table 2). In one patient, early postoperative bleeding produced mediastinal hematoma and cardiac tamponade, necessitating emergency thoracotomy. Four patients who had respiratory insufficiency, required tracheostomy and mechanical ventilatory assistance for several days; the low cardiac output syndrome was a concomitant complication in 3 of these patients. In 2 instances, life-threatening arrhythmias occurred during the postoperative period. While still in the hospital, one patient developed ventricular tachycardia, probably related to digitalis overdosage. After discharge from the hospital, the other patient was brought to the emergency room moribund on the 25th postoperative day with ventricular tachycardia. Although she was resuscitated, a residual neurologic deficit was manifested primarily by memory loss and personality change. One patient was found to have a footdrop without other neurologic deficits during the postoperative period. Residual weakness has persisted during the one year follow-up.

The 9 surviving patients have been followed from 2 to 21 months postoperatively. All patients have been continued on anticoagulants. Anticoagulants are to be discontinued after one year in patients with cloth covered valves. In each instance there has been improvement of cardiac function (Figs. 3 & 4). Two patients have returned to work. The follow-up period and

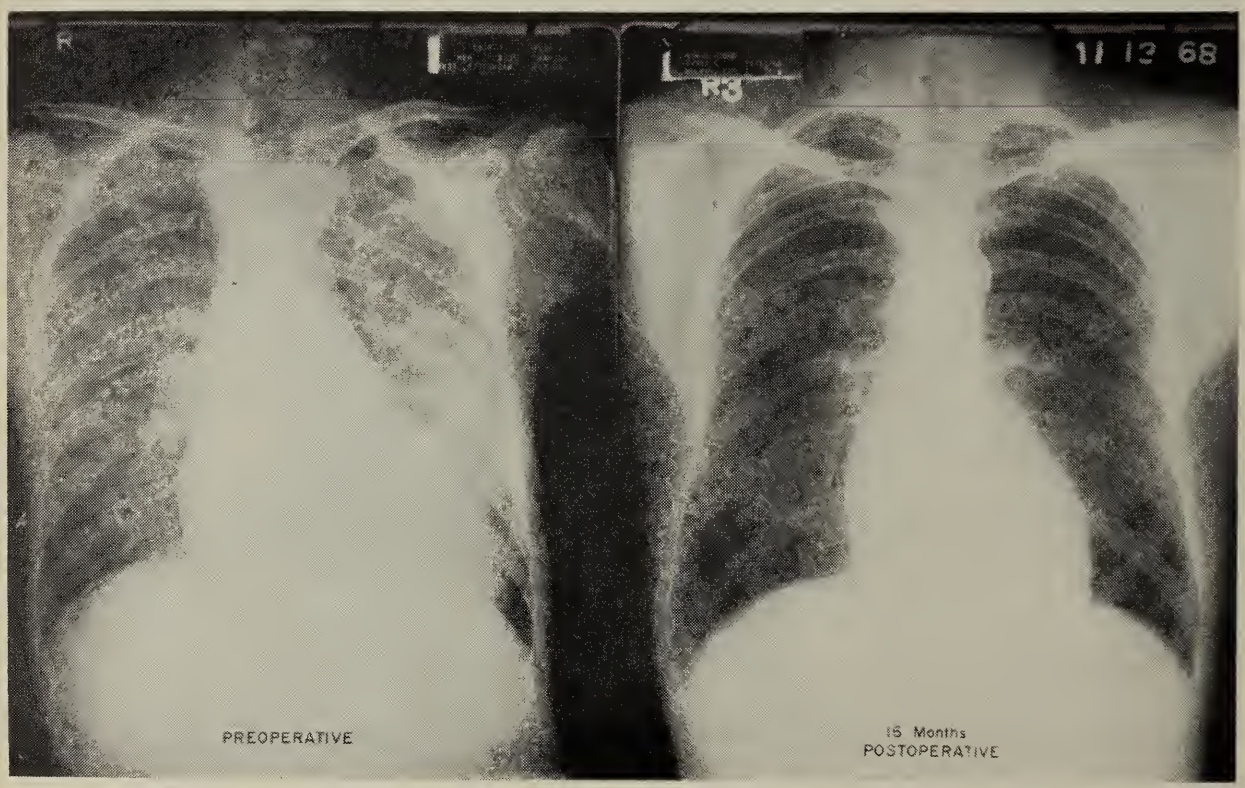


Fig. 3. On left is preoperative chest radiogram of patient (No. 1), at which time there was massive pulmonary congestion, the BUN was 150 mg.%, the serum bilirubin 6 mg.%, and SGOT 1,100 units. On right is chest radiogram 16 months postoperatively. The lung fields are clear and the cardiac silhouette is considerably smaller. The chemical abnormalities have reverted to normal.



FIG. 4. On left preoperative chest radiogram (patient No. 5) reveals pulmonary congestion and bilateral pleural effusion. Note interlobar fluid in right mid-lung field.

cardiac symptomatic status are shown in the accompanying table. One unfortunate individual developed carcinoma of the head of the pancreas for which biliary diversion has been performed. There have been no late complications related to the prosthetic valve or the patient's cardiac status in any patient.

Table 2

COMPLICATIONS OF DOUBLE VALVE REPLACEMENT

Complication	*Patients*
Damage coronary artery	1 (fatal)
Sudden death (cause unknown)	1 (fatal)
Respiratory insufficiency	4
Low cardiac output syndrome	3
Severe arrhythmias	2
Pericardial tamponade	1
Peroneal palsy	1

Discussion

Patients requiring replacement of more than one cardiac valve usually have long-standing incapacitation due to intractable heart failure. In many instances a history of recurrent cardiac failure extends over many years. The consequences of chronic heart failure are several. The heart itself is adversely affected. There is usually gross dilatation of the heart with concomitant decreased ventricular compliance, diminution of ventricular contractility, and in some instances, even fibrosis of the myocardium. Ventricular dilatation begets dilatation of the atrioventricular valve rings with aggravation of the hemodynamic defects. Eventually, the ability of the myocardium to elaborate and store catecholamines is severely depressed or absent. Loss of the ability to produce normal amounts of intramyocardial catecholamines further decreases myocardial function, making the cardiac reserve precarious, particularly when added stress and demands are made on the heart. Lung damage is another consequence of long-standing left heart failure. Chronic pulmonary congestion with recurrent or persistent pulmonary edema is a common finding. Pulmonary fibrosis is a late consequence of prolonged congestion. Also, secondary changes in the pulmonary arterioles, resulting in the aggravation of (or the appearance of) increased pulmonary vascular resistance, occur. Pulmonary functions (both ventilation and diffusion) are greatly depressed. The presence of right heart failure with its concomitant effects upon the liver is frequently encountered in this group of patients. It is common to find hyperbilirubinemia and other evi-

dences of decreased liver function. These preoperative liver dysfunctions can cause urgent deficiencies in certain clotting factors and the inability of the liver to remove the blood breakdown products associated with the hemolysis which may result from the multiple transfusions and blood trauma associated with the cardiopulmonary bypass procedure. In some instances the patient has been chronically catabolic leading to "cardiac cachexia." Prerenal azotemia also is sometimes encountered if there is a severely lowered cardiac output.

The prolonged preoperative administration of diuretics often causes an electrolyte imbalance. Body stores of potassium are especially prone to depletion. This defect can present itself critically in the immediate postoperative period, particularly if the patient is fully digitalized immediately preoperatively. Because of these dangers, all diuretics and long-acting digitalis preparations are usually withdrawn from the patient one week preoperatively. A short-acting digitalis preparation, such as digoxin, is used for maintenance until 48 hours preoperatively, at which time it is withheld. It is necessary to keep the patient on a strict low salt diet and fluid limitations during this period to prevent the occurrence of frank pulmonary edema.

An extensive open heart procedure (such as replacement of two heart valves) upon such patients necessitates the use of an efficient nontraumatic extracorporeal pump-oxygenator system and minimization of the operative insult to the myocardium at the time of cardiotomy. Use of a hemodilution prime for the pump-oxygenator has proved superior to the use of nondilution primes. Mild hypothermia (30-32°C) and coronary perfusion during cardiotomy are preferred. Pacing wire electrodes are routinely sutured to the heart at operation for postoperative cardiac pacing. If the patient has an organized rhythm, right atrial pacing wires are placed. If the rhythm is disorganized or if there is atrial fibrillation, ventricular electrodes are sutured in place. An intra-atrial (right or left atrial) catheter is placed for postoperative monitoring of the cardiac filling pressure.

The most critical aspect of the management of such debilitated patients is the maintenance of vigilant care and intensive support during the early postoperative period. Mechanical ventilation via the indwelling endotracheal tube is continued routinely for at least several hours during the immediate postoperative period. Adequate ventilation, using a volume-cycled respirator, is assured by the frequent determination of arterial blood gas tensions (pO^2 and pCO^2). Ventilatory support usually is not withdrawn until the day following operation. At this time the endotracheal tube is left in place as an airway, and after a trial period of at least an hour off the ventilator, the patient is again assessed. Only if the patient is breathing comfortably and the arterial blood gases are acceptable is the endotracheal tube removed. If ventilatory support is needed beyond 48 hours postoperatively, ventilation is controlled via tracheostomy. Use of a tracheostomy tube for prolonged ventilatory support prevents significant laryngeal damage.

In many instances, support of the cardiac output during the postoperative period is necessary if such patients are to survive. The most meaningful parameters for assessing adequacy of cardiac output are the hourly urine output, the color and temperature of the extremities, and the blood pressure. A high ventricular filling pressure is maintained by liberal administration of colloids (usually whole blood). Adequate filling pressure is assumed by routinely maintaining the right atrial pressure at 15 mm. Hg. (or left atrial at 20 mm. Hg.) by blood transfusions. If cardiac output is inadequate at these filling pressures, more colloid is administered until the right atrial pressure is 20 to 25 mm. Hg. and/or the left atrial pressure is 30 to 35 mm. Hg. The only complication of such transfusion to be avoided is pulmonary edema. Chronotropic agents such as intravenous isoproterenol and electrical pacing are used to increase the heart rate to an adequate level if the rate is suboptimal. Also, isoproterenol is used to increase cardiac output via its positive inotropic effect. Intravenous supplements of digoxin are indicated for treatment of the low cardiac output syndrome if the patient is not adequately digitalized.

Arrhythmias, particularly the ventricular tachy-arrhythmias, are frequent during the

early postoperative period, and the obligatory use of isoproterenol often aggravates the tendency for such arrhythmias to occur. Tachy-arrhythmias are often life-threatening and must be controlled with lidocaine or other measures. The rapid infusion of potassium chloride will correct a low serum potassium and stabilize the cardiac rhythm in some instances. The appearance of life-threatening ventricular tachyarrhythmias, such as ventricular tachycardia and ventricular fibrillation, must be treated immediately by counter shock.

Frequent auscultation of the lungs, assessment of peripheral perfusion, and analysis for the presence of metabolic acidosis or hypoventilation (by blood gas and blood pH determinations) are parameters used to assess the adequacy of cardiac output and/or tissue oxygenation. If "ischemic" metabolic acidosis occurs, it and its cause must be corrected. A base, such as sodium bicarbonate or THAM (tris [hydroxymethyl] aminomethane) is used to restore the acid-base balance to normal; however, the cause of the tissue hypoxia (be it low cardiac output and/or inadequate ventilation) must be eliminated if the patient is to survive. Since these patients frequently have liver insufficiency and poor hemostatic functions, the occurrence of postoperative bleeding and mediastinal tamponade are ever-present hazards. This complication can mimic the low cardiac output syndrome in almost every aspect. Immediate operative decompression is mandatory.

Adequacy of urine output usually hinges on the cardiac output, state of hydration, and the post-stress release of antidiuretic hormone. The addition of mannitol to the pump-oxygenator prime produces a large urinary output during the first several hours of the postoperative period. The incidence of postperfusion renal shutdown has been minimal since the utilization of pump-oxygenators of current designs, a hemodilution prime, and an intra-operative osmotic diuretic.

Better understanding of the problems and management of patients with congestive heart failure, due to severe multivalvular dysfunction that necessitates replacement of two cardiac valves, will undoubtedly lead to better operative results in the future. The major improvements in recent years have been in the postoperative care of such patients. During the critical first few postoperative days, the patient must be in an intensive care environment where there can be constant knowledgeable monitoring of the patient. Insofar as feasible, the first line of monitoring is by physicians and especially trained intensive care nurses.

Although the outlined plan of management during the intra-operative and postoperative periods have evolved from experience and improved techniques, the risk of patients undergoing replacement of two cardiac valves is still formidable. Reports from large medical centers reveal an operative mortality ranging from 12 to 33%.[2, 3, 4] A recent survey of 27 series reveals an operative mortality of 32% in 289 patients subjected to multiple valve replacement.[5] Also, the late postoperative course of patients undergoing double valve replacements in general has been less satisfactory than that of those undergoing replacement of a single valve.[2, 3] However, in many instances, patients are salvaged from progressive cardiac debility and are rehabilitated, sometimes even to the point of resuming their previous occupations. Most patients improve to class I or II functional classification.[3] Late complications of valve implantations, such as endocarditis, valve detachment, intrinsic prosthesis dysfunction, and excessive hemolysis, appear to occur with no significantly greater frequency following bivalvular replacement than following replacement of a single valve.[1, 2]

Summary

During the past 21 months, 11 patients had multiple cardiac valvular replacement with the survival of 9. The majority of these patients have been critically ill and severely debilitated. The most critical period of management in these patients is the immediate postoperative interval. Improvements in the maintenance of cardiac, pulmonary and renal functions during this time have permitted operation with an acceptable risk. The majority of patients have been significantly improved and several are completely asymptomatic.

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The author describes the setting in which patients and all the staff form a community-like group, and in which all take part in making decisions and taking responsibility, contrary to the general hospital setting of staff being in authority for the "patient's good."

Establishing A Therapeutic Community*

RICHARD G. FARMER, M.D.,† Memphis, Tenn.

The use of the immediate environment has long been recognized to be a very effective modality in the treatment of psychiatric patients. This concept of using the hospital environment as a "therapeutic milieu" means that there is produced as nearly as possible the types of interpersonal communication and action within the hospital that exist in the outside world from which the patient has come and into which it is hoped he will be able to return as a useful member.

As long ago as 1946, T. F. Main,[1] a British Army psychiatrist, described his experiences using a mental hospital as a therapeutic agent. He was one of the earliest to use the term "therapeutic community," which he described as "an attempt to use a hospital not as an organization run by doctors in the interests of their own greater technical efficiency, but as a community with the immediate aim of full participation of all its members in its daily life and the eventual aim of the resocialization of the neurotic individual for life in ordinary society." Austin Riggs and others had followed similar principles in the 1920's and 1930's, but Main was the first to delineate the idea so clearly. The then novel phrase implied simply that the healthy portion of the patient's personality was appealed to, nurtured, and allowed to mature within a growth-oriented milieu. Since that time the therapeutic community concept has been developed, operated, and described by Jones,[2, 3] Caudill,[4] Wilmer,[5] and the Cummings,[6] followed in recent years by Gill,[7] Quattlebaum,[8] and others.

The roles and relationships of the patients and staff are markedly different in the therapeutic community from the traditional structure of the mental hospital. In the latter, the role of the patient is to be sick; a sick attitude which gives the message for sick behavior. In the milieu-managed program the patient is regarded as a responsible member of a social group, and therefore his behavior is expected to conform as nearly as possible to the norms of society. In a traditional setting, staff security lies in their being rigid custodians and therefore patients tend to be treated as things. In a therapeutic community there is promoted identification with a caring authority; there is no need to retreat into the isolated position of the disciplinarian. Immediately, one can see the great areas of difficulty for the staff, and particularly for the brave psychiatrist who attempts to institute such radical changes in a well established ward system. I have had the good fortune to be closely involved with therapeutic communities in several other areas of the country and to be instrumental in the establishment of one such program during my tour of duty in the Armed Forces. It is the purpose of this presentation to discuss the establishment of such a community.

In the beginning, the psychiatric service of our general hospital consisted of a closed ward for severely ill patients, with the familiar restrictive paraphernalia, and an open ward for patients who had primarily chacteriologic or neurotic disorders. On the closed ward were heavy screens which covered the windows and doors, locked doors, a nursing station that was enclosed, keeping the staff isolated from the patients, and a subjective, though quite distinct, aura of sickness. There existed no patient participation in decision-making, even though the decisions often determined the patient's future. The patients rarely understood the staff's rationale and felt that decisions frequently were made in an inconsistent and arbitrary manner.

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Patient-staff conflict often retarded the formation of any kind of therapeutic alliance, and the patients often felt that the professional staff acted like the "bad parents of their youth." The doctors were constantly plagued with patients' antisocial behavior, including theft, elopements and fighting, as well as suicidal gestures such as wrist slashing. The patients showed little concern about keeping the wards clean; they performed very poorly on work details. Our nurses were assigned generally for short periods of time and had fleeting contacts with the psychiatric patients.

In re-organizing the service, we hoped to create an atmosphere that would minimize antisocial behavior and enable the physicians to work with the healthy part of each patient's ego. To show the patients how their present conflicts with authority figures recapitulated past conflicts, we sought to establish a microcosmic society within which patients could view themselves and their interactions with others, and could undergo relearning experiences. We wanted to help them develop self respect by assuming more responsibility for themselves and their fellow patients. We thought it would be useful to let them observe the decision-making process and to take part in it; thus we hoped both to provide a model for responsible behavior and to let them experience it.

Our first step was to establish a daily group meeting, which all patients from both wards were required to attend. All professional personnel were present and these community meetings became the major treatment modality on the service, as well as the focal point of community life. To reinforce group interaction as the main therapeutic focus, we abolished individual interviews, except for initial consultation, discharge planning conferences, and family meetings where indicated. However sick the patients, they were considered active members of the community, and were expected to take part in all meetings and ward activities including ward details, to the best of their ability. To help the patients become actively involved in their own treatment, we encouraged them to hold their own meeting once a week, which no staff members were allowed to attend.

We began at once to involve the psychiatric aids in treating the patients. They took part in the feed-back sessions that the staff held daily; there the goals of treatment and the rationale behind their various remarks and decisions were discussed. Soon we could detect the start of a coordinated treatment team. This was the cue to begin some important changes in the ward situation. Since most of the community feeling was centered among the patients on the closed ward, we combined the two wards and the psychiatrists moved their offices to be in closer proximity. So the patients might have some positive way of measuring their progress, we classified patients according to how much liberty they were permitted. The amount of liberty was based on the amount of responsibility each patient had demonstrated to his own satisfaction and that of his fellow patients. The patients were expected to assume responsibility for each other, and the staff encouraged them to take part in making decisions that affected all the patients who lived in the community. That required re-educating the aids as well. They had to learn to act to catalyze and foster group interaction, and not to dominate the group or control the decisions. The psychiatric staff did not override the patients' decisions even if they disagreed with them, except when the safety of a patient or the maintenance of group cohesion was involved.

Patient leaders emerged: patients and staff agreed to the establishment of a patient governing committee to consist of 3 men elected by the patients. The committee, subject to control by the staff, was to arbitrate patient differences and handle routine administrative matters. A master-at-arms was selected by the patients and staff on the basis of demonstrated responsible behavior. His decisions and actions were subject to ultimate review by the patient governing committee. If patients had grievances against him, they could discuss them with the committee. If patients did not adhere to the procedures that had to be agreed upon, the master-at-arms could bring their delinquency before the committee, which had the power to impose sanctions. The sanctions included deprivation of liberty,

banishment to a seclusion room, or lowering of an individual's liberty classification.

The major barrier to the development of the therapeutic community was the attitude of the psychiatric aids. They were reluctant to change their old patterns of interaction, perhaps because they feared they would not understand how to function under the new conditions. They had been taught certain ways of conducting themselves and found it difficult to abandon them. The therapeutic milieu was directly contrary to the concepts of authority they had learned both in their childhood and during their military service. It seemed to them that the "Indians were telling the Chiefs what to do." It was difficult for the aids to grasp the idea of dealing with the healthy part of the patient's ego. They continually complained that we were not treating the patients as patients. "If a patient is responsible," they asked, "why is he in the hospital?" They feared that if a modicum of control were given to the patients, the psychiatric service would turn into a veritable madhouse. To help them deal with what they felt to be a loss of their role and the breakdown of boundaries between themselves and the patients, we arranged for the physicians and aids and nurses to meet regularly to discuss problems in ward management. In addition, we made the staff feed-back sessions more meaningful by encouraging them to discuss freely not only their problems with patients, but also any problems they were experiencing with staff, including the psychiatrists. Any disagreements that occurred between psychiatrists were openly discussed in front of the aids and other staff. Thus the doctors were offering the staff a model for blurring clear-cut authority boundaries; in essence, they were encouraging the aids to assume prestige and status in relation to doctors in much the same way as they hoped the aids would allow the patients to do in respect to themselves.

At first the aids and nurses complained that they felt powerless because the usual methods of control were no longer available to them. (The patients and staff had previously decided to do away with locks, wire screens, bars, and other restrictive paraphernalia). However, they soon found that through the educated use of community pressure they actually acquired more power than they ever had before. One of their major fears—that the service would become leaderless—proved to be merely a fantasy. Staff's leadership was actually strengthened: because having authority over the patients, staff members now enjoyed their respect. Once again, the physicians provided the staff with a model to use with the patients. Although one psychiatrist had the administrative responsibility for the service and was viewed as the doctor in charge, the service actually operated under collective leadership. All decisions were openly discussed and made by the community group. About once monthly, emergency staff meetings were called to deal with special problems. Their purpose was to discuss staff conflicts and thereby curtail harmful staff interactions. When the staff was functioning smoothly, the patient community operated smoothly.

The patients provided their own kinds of resistance to the operation of the community. Initially they were afraid to take increased responsibility, and their dependency problems were exaggerated by their attempts to continue being treated as sick people. They too were confused by the blurring of the military hierarchy and formerly accepted authoritarian attitudes. However, their resistance gradually subsided as they began to shift their dependency from individual staff members to the group and to other patients. Health was measured by responsibility; irresponsible behavior was deplored by the group.

The success of the program in patient management and care far exceeded our expectations. Following the initial and marked resistance by the staff and the patients, the patients grew closer to one another and to the staff. Enthusiasm among both groups was high; patient staff conflict was almost nil. All community members were really working on the same team to create healthy instead of sick responses in the patients. The patients began to take an active interest in their surroundings, complained about the drab wards and began to decorate and refurbish it. Since the pa-

tients were responsible for maintaining the security of the wards, there was a sharp decrease in the number of elopements and thefts. The staff no longer sent patients to the two seclusion rooms but it was the total community that acted on the few occasions when patients needed seclusion.

Most important of all, the individual patient benefited considerably in the therapeutic community. We noted unusual and dramatic improvements in our schizophrenic patients, perhaps because of the tremendous support they received from their fellow patients. Community pressure helped them to test reality and suppress psychotic material. They found new models with whom to identify, were not allowed to isolate themselves, but rather were pressed into social interaction at all times by their comrades.

We believed the subsidence of antisocial behavior was caused by the value placed on altruistic behavior as well as by group cohesion and pressure. The peer group did not tolerate hedonistic behavior in a patient. Therefore in a relatively short time we saw the emergence, even if only temporarily, of new behavior patterns. As patients felt more responsible as individuals, they began to experience a greater sense of personal dignity. Consequently their conflicts with authority figures markedly diminished. Withdrawn patients were quickly influenced by group enthusiasm and rapidly drawn into the socialization process. Patients went so far as to prohibit other patients from engaging in activities that isolated them from the group. The community was used as a social device within which patients could experience emotional relearning. We observed changes in the social attitudes of patients of all diagnostic categories in proportion to their individual capacity for change rather than to the severity of their illness. That is to say, the behavior of some psychotic patients improved more than that of patients with neurotic problems or character disorders.

Closer interpersonal relationships resulted from improved communication, the social pressures of the cohesive group, the emphasis on individual and group responsibility, the staff's warmth and concern for the patients and the realistic leadership that was acceptable to everyone in the unit. The project brought about interpersonal changes among staff too, changes that affected our personal lives and the way that we interacted with one another. The psychiatrists were able to draw close to one another and become a close knit working and social group, which did much to establish a model for the aids and the patients. The closeness of the total community group was not only tolerated but enjoyed by some patients who for the first time dared to get close to other people. Ultimately all the doctors, aids, and patients formed a cohesive group that not only communicated within itself, but also offered instructions to people from other parts of the hospital and to family members.

One reason our program succeeded may be that the psychiatric staff kept in control of the program and the patients through processes we have described. In addition, although there was collective psychiatric leadership, both the hospital administration and the psychiatric service held the administrative chief of service responsible for all final decisions. Thus there was always a leader with whom difficulties could be resolved. It is important in any organization, no matter how democratic, that there be one person who can be held responsible for its actions and policies. Both his superiors and those working under him must be assured that decisions will be made and that the organization will remain intact regardless of the intensity of the discussion that precedes the final decision. Other therapeutic communities have failed because ultimate decisions too often never were reached because of unwieldy collective leadership.

I believe we demonstrated the relative ease with which a therapeutic community can be established. What is required is not specific learned techniques of psychologic thought, but rather an attitude within the community leaders. The practicality of such an approach is obvious. It seems that such a workable program has broad applicability for use in the comprehensive community mental health centers that are being developed. We suggest that the in-patient

services of these centers be organized along the lines of a therapeutic community.

One of the nation's greatest proponents, Harry Wilmer, Professor of Psychiatry at Stanford University, best described the way in which socio-environmental and interpersonal influences play a part in the therapeutic community when he said the following: "There is much to be learned from observing the patient in a relatively ordinary and familiar social environment so that his usual ways of relating to other people and his reactions to stress can be observed. If at the same time he can be made aware of the effect of his behavior on other people and helped to understand some of the motivations underlying his actions, the situation is potentially therapeutic."

This is the distinctive quality of a therapeutic community.

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"Paper-work" is always an unpleasant chore for a busy physician! Yet a few moments of reflection and recollection points up the time wasted in an attempt to recall and assemble facts to meet some requirement in documenting services, diagnosis, etc., for a third party payment, leave alone the embarrassing medicolegal argument. Much time is saved by attention to routine recording when the subject matter is fresh in mind. This article provides an interesting overview of the subject.

Pardon Me, Doctor, Your Records Are Showing--

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At the conclusion of 36 months operation of the Certification processes under Medicare, Title XVIII, we thought it might be of mutual benefit to acquaint physicians with some of the errors and/or omissions found in medical records. We are grateful for the cooperation given to the Tennessee Department of Public Health during this task. We have asked Mrs. Laudine G. McCampbell to summarize information bearing on the subject hoping that it will be received not as criticism but as a mutual effort to improve medical records. (J. H. L. Heintzelman, M.D., Director, Bureau of Medical Care Services, Tennessee Department of Public Health.)

Because the public is becoming at least tangentially more medically oriented, and because the patient's medical record appears to be assuming more and more significance for regulatory agencies, fiscal intermediaries, and as the only measure for the standard of patient care rendered by a given facility (once the patient is discharged), it might be of interest to physicians to review some of the laws, regulations, and applied interpretations for physician recording requisite for hospital participation in the Medicare Program. Since March 1966, I have been reviewing patient medical records in hospitals participating under Title XVIII, better known as the Medicare Law, having visited more than 150 of Tennessee's 206 hospitals. On the basis of personal observation, I have become more and more convinced that doctors lose malpractice suits—or place themselves and the hospital in needless jeopardy—from poor documentation in medical records rather than poor professional practice. To me, there appears to be no correlation between the size of hospital or professional background of the physician with regard to the status of medical records. Some of the more efficiently organized and completely documented medical records are to be found in small hospitals with a total professional staff of one or two physicians.

Public Law 89-97, known as the Medicare Law or Title XVIII, reads in regard to medical records:

"The medical records contain sufficient information to justify the diagnosis and warrant the treatment and end results. The medical records contain the following information: Identification data; chief complaint; present illness; past history; family history; physical examination; provisional diagnosis; clinical laboratory reports; x-ray reports; consultations; treatment, medical and surgical; tissue report; progress notes; final diagnosis; discharge summary; autopsy findings. . . ."[1]

Item-by-item followup of this paragraph is in the form of Regulations, "Conditions of Participation, Hospitals," and "Medicare Surveying Guidelines," and the Hospital Survey Report, Form SSA-1537:

Provisional Diagnosis. This is an admitting diagnosis, made on every patient at the time of admission, as a basis for beginning treatment.[2]

Many physicians desist from stating at the time of admission not only a diagnosis but even a reason for admitting the patient. Yet, how can any physician expect nursing care to be adequately implemented when the nurse must guess or "diagnose the patient herself" to institute care for the patient? Most of us have met too many times the discrepancies between the patient's complaint and the physician's diagnosis, but without the physician's information, the patient's information is the only alternative.

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Orders. All medical orders are in writing and signed by the physician. Telephone orders are used sparingly, are given only to the licensed nurse and are signed or initialled by the physician as soon as possible.[3] Signatures and initials on orders will indicate whether the physician is giving orders to authorized personnel.[4] Therapeutic diets are instructive, accurate, and complete as possible. . . .[5] The medical staff has established a written policy that all toxic or dangerous medications, not specifically prescribed as to time or number of doses, will be automatically stopped after a reasonable time limit set by the staff. The classifications ordinarily thought of as toxic or dangerous drugs are narcotics, sedatives, anticoagulants, antibiotics, oxytocics, and cortisone products.[6]

Tennessee's Hospital Licensure Regulations state "All medical records shall contain the orders for medication and treatment, written in ink and signed by the prescribing physician or dentist, and if given verbally, undersigned by him upon his next visit to the institution."[7] However, not only has record review in hospitals revealed some pencil-written orders, but some "stamped" signatures and innumerable initials only (without signature of last name). The disparity of exactness in prescribing specifically has perhaps a wider and more hazardous gamut when it comes to physician orders; for example, I have seen the following written as a total order: "Sedative, if needed"; "Penicillin, b.i.d."; "Discharge when patient desires"; "Librium, p.r.n."; "Placebo"; "Placebo pill"; "X-ray"; "Move frequently"; "Pink purgative." These represent only a few of the grossly nonspecific orders that could be listed from recent patients' medical records.

History. The past history should include such information as childhood diseases, immunizations, trauma suffered, surgical operations, and serious medical disorders.[8] A family history should include an accounting of causes of death of next of kin and serious illnesses of next of kin, such as diabetes, cancer, stroke, tuberculosis, and psychiatric disorders.[9] Only members of the medical staff and house staff are competent to write and dictate medical history and physical examinations.[10]

In recording practice, some physicians ignore ALL history for patients, while others ignore only the family history. Some facilities follow a practice of having someone other than the physician to take the patient's history. The result is usually quite lengthy, but may not be at all relevant to diagnosis and treatment of the patient. Even though some of these are countersigned by the physician, seldom do they indicate that the physician has reviewed the recording from some examples that I have seen, such as: "Wound removed 10 years ago"; "Hystectomie"; "Hystecty"; "Hyst as a child" (but was a Gravida VI); "Chicken Pops"; "Measleys"; "Appendecomie"; "Explored several times"; "Mother was a mentalist"; "Three aunts by marriage was diabetic"; "Insanity by marriage"; and innumerable others.

Chief Complaint. The chief complaint includes a concise statement of complaints which led the patient to consult his physician and the date of onset and duration of each.

The physician's statement of the chief complaint and the nursing admission note often suggest entirely different patients when compared. When the physician records no statement of the chief complaint, then the nursing admission note must stand for posterity for gauging the appropriateness of medication and treatment during the patient's stay (unless the physician records appropriate document this subsequently, which is rare). If the questions, "What do you have?" "How long have you had it?" and "Is it getting any worse?" are answered, a complete, concise chief complaint is usually well-documented.

Physical Examination. All patients are admitted to the hospital only on the recommendation of a physician; a physician is directly responsible for the care and treatment of each patient; a medical survey is done and recorded on each dental patient.[12] The physical examination statement includes all positive and negative findings resulting from an inventory of systems.[13]

Deficient recording of the physical examinations by the physician primarily occurs by the use of some type of check list form which does not include an explanation recorded by the physician for the positive findings other than such lucid descriptions as "Pelvic mass"; "Distended"; "Diabetic signs"; "Short of Breath"; "Mass in abdomen"; etc. For some records, the examination recording gave NO indication of prior amputation of limbs, total blindness, or deafness.

Progress Notes. Progress notes begin with an admitting note by the physician showing the general condition of the patient on admission and end with a discharge summary noting the condi-

tion of the patient at the time of his release, his course in the hospital and recommendations for further care. The *Discharge Summary* may be recorded on a separate form rather than at the close of the progress record. There is no arbitrary rule on how often a note should be written; an acute or unusual case may require several notes in one day, where a convalescent case may require a note every 4-7 days. The physician himself should make the entry and sign it.[14]

Some physicians have patients who make no progress? (from my observations) because they record no notes regarding their patient's condition — again, discount the length of stay for the patient as a factor. Still other doctors record note after note of: "Seems about the same"; "As usual"; "Unchanged." Such notes assume meaning only following a well-documented recording of the patient's condition. More recent trends in recording state that a progress note should be recorded as the patient's condition changes—either for better or worse, this should be far more appealing to physicians than the former requisites of a progress note every visit. In addition, adequate progress notes reflect the story of the patient's stay in the hospital and can serve as documentation for Medicare Certifications, aside from the fact that good progress notes assure communication with the other members of the professional staff who might need to assume care of the patient in an emergency situation, and for the paramedical staff as well.

Consultations. The patient's attending physician is responsible for requesting consultations as indicated: the patient is not a good medical or surgical risk, diagnosis is obscure, there is doubt as to the best therapeutic measures to use, or there is a question of criminal action. The record should indicate the reason. . . . JCAH also lists the following specific cases which require consultation: first Caeserean sections, operations for the sole purpose of sterilization of either male or female, and interruption of known pregnancy (therapeutic abortion).[15]

In many hospitals, records have been reviewed without evidence of consultation for each of the entities above. In some instances, physicians believe that this is justified in that there is not another physician in the vicinity who is as qualified to make the decision in the case. In some instances, the case is discussed with other members of the medical staff and there is obviously no alternative other than the procedure contemplated, but none of this is documented for the patient's record, and in some instances there is no indication in the record that the case was discussed with another physician. For community hospitals situated away from metropolitan areas, statistics on patients referred to medical centers or to specialists in metropolitan areas should assume the same stature as consultations within the facility, but few hospitals keep this information—in part, this is probably because the physician writes the order "Discharge," and there may be nothing in the patient's record to indicate referral.

Diagnostic Treatment Procedures. . . . The surveyor should check to see which tests are required on admission by the medical staff. Admission tests may include chest x-rays, blood glucose determinations, and complete blood count.[16] (Note: Admission laboratory must include at least a hemoglobin or hematocrit and urinalysis.[17]) Signed laboratory reports are included in the chart and all laboratory tests are ordered by a physician. . . . The attending physician's request for x-rays contains a concise statement of the reason for the request and reports of interpretations are written and signed by the radiologist and become a part of the patient's record.[18]

Deficiencies have been noted, both from the laboratory work ordered and not reported, and from laboratory work reported for which no order was indicated; radiology interpretations were always found where a consultant radiologist or a local radiologist read all films, but interpretations have been missing occasionally and grossly when films were read by a staff physician other than a radiologist.

Surgical Patient Records. A complete physical and history is on file *prior to surgery* with findings of a pre-anesthetic physical recorded and a post-anesthesia follow-up note written 3-24 hours following surgery, noting any postoperative abnormalities or complications, including vital signs and general condition of the patient. . . In major surgery, the surgeon's description should indicate that a physician served as first assistant; second and third assistant should also be named; and in lesser surgery, the first assistants. Sponge count verification by named individual and identification of circulating and scrub nurses in major cases should be recorded. . . . A properly-executed consent form for surgery should be in the patient's chart prior to surgery. An operative report should be written or dictated immediately after surgery by the surgeon responsible. All infections of clean surgical cases are recorded and reported.[19] All tissues removed dur-

ing surgery should be forwarded to the pathologist. The receipt of all tissues should be acknowledged and a gross description at least should become a part of the patient record.[20]

Many records viewed on patients who have had an operation during that hospital admission do not contain a recorded physical examination, much less a detailed physical examination, and in some records, there is no operative note. Many operative notes do not indicate whether or not a physician assistant was present in the operating room, and perhaps even more do not indicate the paramedical assistant's or verification of the sponge count. For some operative notes, it is not possible to ascertain the exact procedure the patient underwent in the operating room, and it is not uncommon to (of necessity, from data at hand) "guess" whether or not tissue was removed during a procedure, and again, "guess" that it may have been sent to the pathologist. Some authorities have said that a detailed operative note recorded as late as 2 weeks following the procedure is not worth the paper it is written on, yet some surgeons in Tennessee (both general practitioners and surgeon members of the American College of Surgeons Board and Certified) persist in performing major surgery with only one physician in the operating room, and record details of nonroutine operations weeks-to-months following the procedure. Some anesthesiologists neglect the post-anesthesia response note 3 to 24 hours following the procedure, and if the anesthesia form does not happen to have a block at the bottom of the page designated "signature," the physicians giving anesthesia tend not to sign that record.

Autopsy Reports—Autopsy reports become a part of the patient's clinical record. Tissue reports and autopsy reports are signed by the pathologist.[21]

Pathologists in Tennessee seem to have a "stamp fixation" in that so many of them utilize a signature stamp. (Note: Hopefully the hospital has required an appropriate Certification with approval from their medical staff for any stamps to be used in the medical record.) Some pathologists do not sign reports on cytology examinations.

Emergency Room—Adequate medical records are maintained for each emergency case and include: Patient identification, history of disease or injury, physical findings, laboratory and x-ray reports (if done), diagnoses, treatment, disposition of case, and physician's signature.[22]

Some physicians must have an aversion to entering a diagnosis on the Emergency Room record, from records I have observed, while others appear to avoid the signature; still others do not indicate the disposition of the case or indicate the treatment. Probably more law suits involve the Emergency Room Service of the hospital than any other unit, and this factor should make the physician more objective in recording emergency room visits. True, there is no way to keep patients from instituting law suits, but a word or two recorded at the time of the visit, can stand higher than volumes recorded months or years later in influencing the outcome of a suit.

Authorship and Signatures. If interns and unlicensed resident physicians write and sign medical histories and physical examinations, these must be authenticated by the attending physician. Licensed resident physicians need not have documentation countersigned. JCAH permits a physician to use initials, provided the initials can be identified as belonging to the physician involved.[23]

Telephone and verbal orders appear to be received regularly from a few physicians. Many times a later order will be recorded or a progress note by the physician, but without countersignature for a prior order. I have wondered why some doctors who persist in "signing" records with a single initial or nondescript character scribble do not fear forgery to medical records, prescriptions, etc.

Promptness of Record Completion. Medical staff bylaws provide for keeping accurate and complete clinical records, and the medical record committee supervises the maintenance of medical records at the required standard of completeness. Record control procedures should be instituted to insure that the medical record department received the patient chart within a reasonable time following discharge or death, that the chart is reviewed quantitatively for completeness by record personnel and qualitatively for completeness by the attending physician. Procedures should be instituted by the medical staff and governing body for disciplinary measures to be taken where there is consistent failure to timely complete the record.[24]

As with records generally, to me, there seems to be no pattern regarding the physician's training, professional specialty, age, professional society membership, etc. to cor-

relate with the promptness factor of physician's recording. Surprisingly, the size of the staff appears not to be a factor. One hospital with an active professional staff of 3 physicians periodically enforces the "no admission privilege" for one of the three. Teaching hospitals have an advantage over total private or open staff facilities in that the house staff are usually responsible for the major areas of recording and salary checks can be withheld for record delinquencies. In some instances, a doctor will give his office staff one diagnosis for the records for a particular patient, the insurance clerk at the hospital a similar bit of information, Workmen's Compensation or the patient's employer similar information, when he could record a discharge summary and final diagnosis at the hospital and have these data sent to appropriate sources. Not only would the number of times the physician handles the patient medical record be decreased, but in many instances, would avoid queries resulting from slightly different diagnoses, or even from a different sequence in listing the diagnoses, as reported by the physician and the hospital.

Conclusions

Anytime anyone with orientation to medical records reviews a representative block of medical records in any given hospital, he will find deficiencies in some of the records —even the person who may have checked them as being "complete." In reviewing records, I try to look for consistent deficiencies or patterns of discrepancy or poor habits in recording that may have crept into practice without the awareness of the medical staff. It is gratifying to note from return visits to the same hospitals that the physicians DO respond favorably to suggestions from medical record librarians, sometimes, however grudgingly! And, from personal discussion with doctors, I am convinced that adequate medical records of patients become: (1) the basis for comparison for diagnostic or therapeutic handling of similar types of cases; (2) afford the greatest possible measure of protection for the practitioner (and the hospital) in his profession for medicolegal defense; and (3) most importantly, the well-documented medical record serves as the basis for future treatment of the patient, whether he is reporting to the physician who "hospitalized" him five years ago or presents as an emergency for the first time. In each instance, the complete, concise medical record is to the physician's advantage—not really a jewel of accumulatum to amplify files in the medical record department!

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CLINICOPATHOLOGIC CONFERENCE

Baptist Memorial Hospital
Acute Leukemia with Terminal Febrile Illness*

Rodger C. Haggitt, M.D. and
Henry Rudner, Jr., M.D.

A 49-year-old white man, was admitted to Baptist Memorial Hospital on Dec. 17, 1968, and expired on Jan. 15, 1969.

He was first seen at this hospital on Nov. 29, 1966, when he was admitted because of sore throat and fever. He developed an upper respiratory infection 7 weeks before admission and this was followed by progressive malaise and headaches. Four weeks before admission he stopped work as a farmer because of severe soreness of the throat and swelling in the cervical region. He consulted his physician who found a blood count to be abnormal. He had always enjoyed excellent health and had never had any serious illnesses.

Physical examination on Nov. 29, 1966, revealed grossly enlarged anterior cervical nodes without adenopathy elsewhere. The mucous membranes was quite pale, and the tonsils were enlarged and covered with exudate. The liver was palpable 2 finger breadths below the right costal margin and there was questionable enlargement of the spleen. The HCT was 24.5%, Hgb 8.8 gm. WBC count 26,900 with 62% early atypical cells, 1% progranulocytes, 5% PMN, 1% bands, 24% lymphocytes and 7% monocytes. The phase platelet count was 69,000. A throat culture grew out normal flora. Bone marrow examination revealed a cellular preparation with replacement of normal marrow elements by myriads of stem cells. This was considered diagnostic of acute leukemia.

Therapy with 150 mg of 6-mercaptopurine and 60 mg of prednisone daily was begun, and the WBC count subsequently decreased to 6,900. There was improvement in his clinical condition. During his hospital stay, the diagnosis of diabetes mellitus was made and he was given Orinase and a diabetic diet for control.

Before dismissal from the hospital on Dec. 19, 1966, the HCT was 36%, Hgb 11.7 gm, WBC count 6,200 with 3% PMN, 27% stem cells, 46% lymphocytes and 24% monocytes. The platelet count at this time was 29,000 and the blood sugar was 122 mg (fasting). Blood cultures during this hospitalization were sterile and the chest roentgenograms were negative.

He was followed closely as an outpatient and continued to take 6-mercaptopurine. By February, 1967, the cervical nodes and the spleen were no longer palpable and the WBC count was 4,000 with a normal differential. He did well until March, 1968, when it was necessary to hospitalize him to investigate a leukopenia of 3,500 cells. There were still no abnormal cells apparent in the peripheral blood and the HCT. and platelet count remained normal.

The dosage of 6-mercaptopurine was decreased but the white count continued to fall and he was readmitted to the hospital on May 7, 1968. The HCT was 39% Hgb 13.4 gm, phase platelet count 242,000, and the WBC count 3,500 with 38% PMN, 5% PME, 53% lymphocytes and 4% monocytes. A roentgenogram of the chest and an EKG were normal. Bone marrow examination demonstrated 48% atypical immature cells. The leukopenia was ascribed to activity of his acute leukemia and he was given prednisone, 40 mg daily in addition to his 6-mercaptopurine. He was sent home from the hospital feeling well and was once again followed closely as an outpatient.

In late November, 1968, the patient again developed recurrent sore throats. Over a 3-week period the WBC count rose from 5,000 with an essentially normal differential to 24,000 with 80% young atypical cells in the peripheral blood. He was readmitted to the hospital but, aside from mild soreness of the throat, without objective changes and he had no complaints. There were no abnormalities on physical examination other than a midly Cushingoid appearance. Chest roentgenogram performed on Dec. 18, 1968, showed scattered fibrotic changes within the lung bases. No definite consolidations or infiltrates were seen. Despite reinstitution of 200 mg of 6-mercaptopurine and 60 mg of prednisone daily, the WBC count rose to 58,000 with 82% stem cells. On Dec. 21, he was given vincrestine in a dosage of 2 to 3.5 mg IV per week. By Dec. 23, the WBC count was 83,000 and 5 days later had reached 115,000. The HCT continued to fall and he was given fresh blood transfusions. The platelet count fell progressively to 31,000. Vincristine was continued and over a period of about 2 weeks the rising white count was controlled. On Dec. 29, fever was noted for the first time since admission, his T. rising to 100.6°. He also felt weak and developed marked anorexia. There were no new findings on examination and repeat chest roentgenograms failed to reveal any significant change. He developed abdominal distention and tenderness in the upper abdomen with nausea and epigastric discomfort. This responded to increased doses of antacids.

On Dec. 31, rales were heard in the right lung base, he remained febrile and the diagnosis of pneumonia was made. Blood cultures obtained at this time were sterile. Ampicillin therapy was begun, and by Jan. 1, his T. had returned toward normal levels but he continued to have daily fever in the range of 99.4°. On Jan. 6, chest x-ray revealed clear lung fields but enlargement of the mediastinal nodes was noted for

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the first time. The WBC count was now 14,600 with persistence of many young atypical cells. One day later, on Jan. 7, the count was 4,600 with 52% PMN. 6-Mercaptopurine and vincristine were discontinued. The low grade fever continued until Jan. 8 when he had a shaking chill followed by a T. of 103.6°. Further blood cultures were again sterile. He continued to feel weak, had frequent bouts of sweating, and developed patchy white lesions in the pharyngeal mucosa which responded to therapy with Mycostatin suspension.

He continued to have daily temperature spikes to the 103° range and was given kanamycin cephaloridine (Loridine) and large doses of penicillin intravenously. His white count began to fall and on Jan. 10 was 2,800 with a platelet count of 5,000. Further transfusions were required. He was able to produce no sputum but a throat culture grew out Klebsiella and *Aerobacter aerogenes*. His purpura increased markedly and his platelet count remained quite low. Repeated examinations of his chest revealed this to be clear. There was slight tenderness above the right costovertebral angle but the urinalysis was clear and cultures were sterile. He continued to have high fever with marked weakness and malaise. He was treated with colistimethate (Colymycin) and methicillin (Staphcillin) as well as massive doses of penicillin without effect on his downhill course. On Jan. 15, dullness at his left lower lung base, accompanied by many rales, was noted. He was given platelet and blood transfusions but did not respond and died on the night of Jan. 15, 1969.

Clinical Discussion

Presiding: DR. J. D. UPSHAW.

We have a case today of a patient with proven acute leukemia who had a febrile terminal illness. We are pleased to have Dr. Henry Rudner to discuss it for us.

DR. HENRY RUDNER, JR.: This 49-year-old patient was admitted to Baptist Hospital on Dec. 17, 1968 and died on Jan. 15, 1969. He had a rapid terminal illness superimposed on previously diagnosed acute leukemia. He first came to the hospital on Nov. 29, 1966, because of a sore throat and fever. An upper respiratory infection had been present for 7 weeks before admission and was followed by progressive malaise and headaches. Four weeks prior to admission it was necessary for him to stop work as a farmer because of a severe sore throat, and at that time he noticed cervical lymph node enlargement. He consulted his physician who gave him sulfa drugs. His symptoms failed to improve and his blood count was abnormal. Physical examination on November 29 revealed grossly enlarged anterior cervical lymph nodes without evidence of adenopathy elsewhere. The mucous membranes were pale and the tonsils were enlarged and covered with exudate. The liver was palpable two finger breadths below the right lower costal margin. There was questionable enlargement of the spleen, indicating a rather violent disease. On Nov. 30, 1966, the HCT was 24.5%, the Hgb was 8.8 gm and the WBC count was 26,900 with 62% early atypical cells. His phase platelet count was 69,000 and the bone marrow revealed replacement of normal marrow elements by myriads of stem cells which were diagnostic of acute leukemia, stem-cell type. A throat culture at this time grew out normal flora. The patient was given excellent drugs—150 mg of 6-mercaptopurine and 60 mg of prednisone daily. During the first 6 days of hospitalization, he was afebrile but he continued to complain of marked sore throat. By Dec. 8, the WBC count was 57,000 with 94% stem cells. At this time, he began to improve clinically and by Dec. 14, his white count had decreased to 9,900 with 63% early atypical cells.

One questions whether at this time his acute infection might, in some way, have initiated a partial remission from his leukemia. It is known that acute streptococcal throats, staphylococcal infections, and viral infections of various kinds can cause the symptom complex of leukemia to return almost to normal for indefinite periods. He was also taking excellent drugs which were helpful. The sore throat improved and his temperature returned to normal levels. At this time he was discovered to have diabetes. Was his diabetes aggravated by taking steroids? It is a good possibility because he was mildly diabetic and was a first controlled by Orinase. The HCT was not 36% with a Hgb of 11.7 gm and WBC count of 6,200 with 3% PMN and 27% stem cells. The platelet count was 29,000 and, therefore, still diminished. A chest roentgenogram was normal. He was dismissed from the hospital on Dec. 19 and was followed as an outpatient. By Feb., 1967, his HCT was 42° and the white count 4,000 with a nor-

mal differential. He was in remission from his leukemia at this time. There was no adenopathy and the spleen and liver were not palpable. This remission was maintained for 13 months until March, 1968, when his white count gradually began to decrease. There were still no abnormal cells in the peripheral blood, and the HCT and platelet count both remained normal. The dosage of 6-MP was decreased; the white count continued to fall. Frequently, the white cell count will fall even after the drug is stopped because there is a period of effectiveness that persists after drug intake has ceased. The phase platelet count was 242,000 which represents an improvement from previous counts. The white count was 3,500, and x-rays of the chest and an EKG were normal. The bone marrow examination showed a large percentage of atypical immature cells (48%) and the physicians believed the leukopenia was due to the leukemia and not to therapy. Therefore, he was given prednisone—40 mg daily along with his 6-mercaptopurine. He was sent home from the hospital feeling well and was followed as an outpatient. Late in November, 1968, the patient began to develop sore throat again, possibly indicating an exacerbation of his leukemia. Over a 3-week period the white count rose from 5,000 to 24,000 with 80% young cells of the atypical variety in the peripheral blood. Chest x-ray on Dec. 18 demonstrated some scattered fibrotic changes within the lung bases, but no definite consolidations or infiltrations. Was this a leukemic infiltration in the lungs or was this a low grade fungus infection? He was taking drugs that would make him more susceptible to certain fungi such as Candida or Aspergillus. The white count rose rapidly and immature cells were evident in the peripheral blood despite reinstitution of therapy with 200 mg of 6-mercaptopurine and 60 mg of prednisone. He was now in complete exacerbation. He continued to have a low grade fever until Jan. 8 when his temperature rose to 103.6°. This spike in temperature was preceded by a chill. In other words, something happened at this moment on Jan. 8, and the patient died on Jan. 15. Some severe intercurrent infection is occurring. He had further blood cultures which were later reported as showing no growth but he was receiving Ampicillin at the time. He continued to be weak and had extensive thrush lesions in his throat. Moniliasis is often found in patients seriously ill with a blood dyscrasia and who are taking these drugs which destroy most of the bacterial flora, thus allowing monilia to get the upper hand. Since he was started on nystatin (Mycostatin) with clearing of the mouth lesions in 2 to 3 days, could he have aspirated any of this material into the lungs? If it is in the mouth and swallowed, no; but if he coughed or aspirated, he could introduce an infection into the lungs at this time with either Candida or possibly a coexisting fungus of the Aspergillus variety. He continued to spike daily fevers in the 103° range. Therapy with kanamycin, cephaloridine and large doses of intravenous penicillin were given. The white count fell to 2,800 and on Jan. 10 his platelet count was 5,000. We are not told about his gamma globulins. Serum electrophoresis may demonstrate a hypogammaglobulinemia in these patients and their resistance suddenly is nil. He required further transfusions and had daily temperature spikes to 102°. He produced no sputum but throat cultures grew out Klebsiella and Aerobacter aerogenes. At this time, the physical examination of his chest was not remarkable. There was slight tenderness over the right costovertebral angle. Could this be renal involvement, perhaps pyelonephritis? This could occur with a negative urinalysis, and his urine culture was sterile. He was taking antibiotics which may explain this negative urine culture. He continued to have high spiking fever, marked weakness and generalized purpura with marked malaise. He was treated with colistimethate and methicillin. Septicemia, gram-negative organisms, terminal staphylococcal, other types of pneumonia and Friedlander's pneumonia commonly respond to kanamycin. He had many drugs but none had any effect on his downhill course. On Jan. 15, he was noted to have some dullness in the left lung base with many rales in this area and I believe he probably had a terminal overwhelming pneumonia. He was given platelet and

blood transfusions but did not respond and died on the night of Jan. 15, 1969. In trying to synthesize the terminal event, I think you could say that findings at autopsy will be those of acute leukemia with leukemic infiltration in some of the organs and with petechial hemorrhages in the brain. I believe he had a rapid and fulminating Klebsiella pneumonia leading to death. We probably will find terminal pyelonephritis. We must consider bacteremia with gram-negative organisms when there is any sudden collapse in the patient's condition, especially if the patient has diabetes or a blood dyscrasia.

Dr. Booth, would you now show us the films that you have?

DR. JAMES L. BOOTH: On admission in November, 1966, and again in May, 1968, the chest film was normal. A third chest film on Dec. 18, 1968, showed widening of the superior mediastinum compatible with lymph node enlargement and the diagnosis of leukemia or lymphoma. The last chest film on Jan. 6, 1969, again showed the widening of the mediastinum but no pulmonary infiltrate. The clinical diagnosis of pneumonia was not substantiated but the patient had no further chest films.

DR. HENRY RUDNER, JR.: There are interesting findings in the literature concerning autopsies on patients dying with acute leukemia. Of 123 cases, 44 instances of lobar pneumonia were present in one series. Of this series, 14.6% had nodular goiter with hyperthyroidism, 13% had tuberculosis. Hydrothorax was present in 13 cases, ascites in 10 and hydropericardium in 8. Ulcerative colitis and proctitis were found in 7 patients.

DR. J. D. UPSHAW: This patient presented quite a problem toward the end of his illness, and we thought he had gram negative septicemia which could not be identified because of antibiotic therapy. Pseudomonas is probably the most common organism encountered in this situation but other gram-negative organisms such as Klebsiella and Aerobacter are close. We will hear from Dr. Haggitt.

Pathological Discussion

DR. RODGER C. HAGGITT: The first contact the Hematology Section had with this patient was the anemia study performed in November, 1966. The white blood cell count was 26,900 and there were 62 atypical cells per 100 white blood cells. The first slide demonstrates these cells in the peripheral blood (Fig. 1). They are immature cells with a fine chromatin pattern separated from the parachromatin; the nucleoi are prominent. The cytoplasm is merely a thin rim surrounding the nucleus. These cells have none of the distinguishing features of myeloblasts or lymphoblasts and, for that reason, the diagnosis of acute leukemia, stem-cell type, was made. This does not imply that the proliferating cells are pluripotential hematopoietic cells but means that with the technics available, they could not be further classified. The next slide is a bone marrow smear obtained in May, 1968, and demonstrates similar cells in the marrow (Fig. 2).

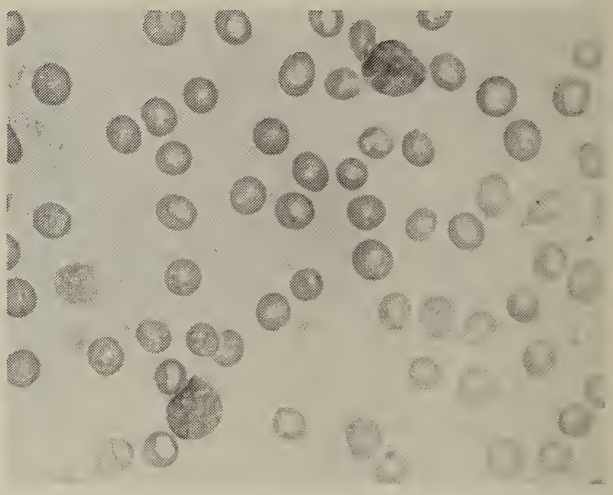


Fig. 1. Peripheral blood smear demonstrating immature cells. (Wright's stain)

At the time of autopsy, the patient's body was obese with the most marked accumulations of fat in the face and trunk. There were no palpable lymph nodes. The trunk and extremities were covered with petechiae. Examination of the oral cavity revealed no exudate in the pharynx or on the buccal mucosa. The abdomen contained 250 ml. of serous fluid but the pleural cavities were dry. The lungs were of normal weight and the only gross abnormality was patchy atelectasis of both lower lobes. The heart was diffusely enlarged, weighing 450 gm., but was otherwise unremarkable. The liver was grossly enlarged, weighed 2,600

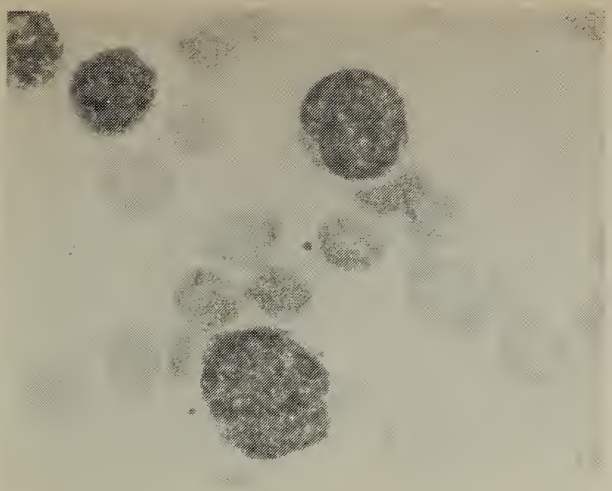


FIG. 2. Bone marrow smear. Note fine chroma in pattern, parachromatin and prominent nucleoli. (Wright's stain)

gm., and had rounded edges. The sectioned surface was peppered with 3 to 7 mm firm white nodules. The spleen weighed 600 gm. and was somewhat firm. Fat necrosis involved the pancreas and peripancreatic fat. Petechiae were scattered along the gastric mucosa at the lesser curvature. Two irregular shaped 2.0 cm ulcerated lesions were present opposite the ileocecal valve in the cecum. The kidney cortices contained multiple petechiae but there was no evidence of pyelonephritis. Sections of bone marrow were obtained from multiple sites and a 1.0 cm lytic defect was identified in one of the lumbar vertebral bodies.

Microscopic examination of the lungs revealed several minute necrotic lesions surrounded by an acute inflammatory response. Sections of the liver demonstrated marked centrilobular fatty change. The portal triads were infiltrated with large mononuclear cells, some of which were atypical and may represent leukemic cells. The nodules described grossly consisted of necrotic parenchymal cells surrounded by a rim of fungal mycelia and accompanied by a mononuclear cell infiltrate. Silver stains of the fungus demonstrated hyphae and blastospores compatible with *Candida albicans* (Figs. 3 and 4). This organism was also identified in the lung lesions and was grown in pure culture from both lungs and blood. Atypical mononuclear cells crowded the red pulp of the spleen; lymphoid follicles, although small, were readily identified. The



FIG. 3. Section of liver demonstrating fungal mycelia. (Gomori's methenamine silver x40)

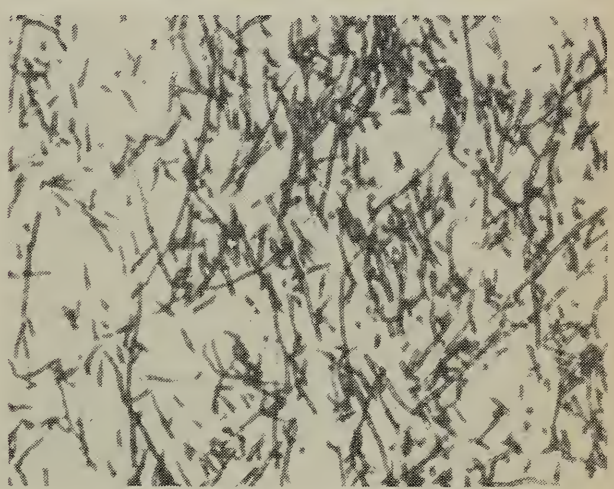


FIG. 4. Hyphae and blastospores of *Candida albicans* in liver section. (Gomori's methenamine silver x450)

ulcers in the cecum were necrotic lesions accompanied by an infiltrate of mononuclear cells, some of which were atypical (Fig. 5). Cecal ulcers have been described

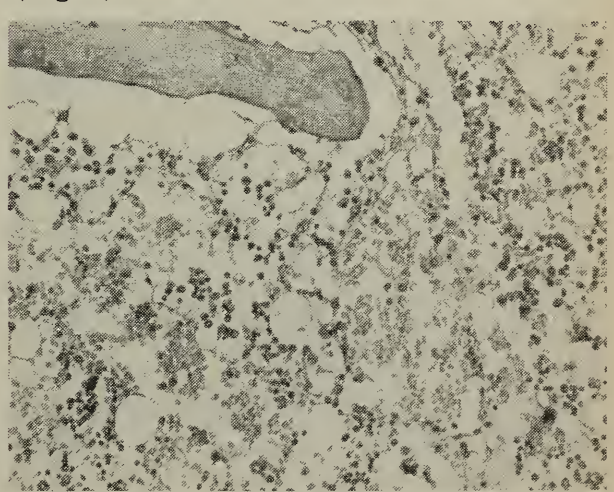


FIG. 5. Bone marrow section from autopsy demonstrating marked hypocellularity. (H & E x450)

as incidental findings at autopsy,[1] as complications of steroid therapy and as complications of leukemia due to necrosis of enlarged lymphoid aggregates or secondary to the chemotherapeutic agents.[2] Sections of bone marrow demonstrated marked hypocellularity with scattered leukemic cells and erythroid precursors remaining.

There were changes in the pancreas consistent with acute pancreatitis which may explain his episode of abdominal pain and distention. Acute pancreatitis has been found in association with diabetes[3] but has also been said to complicate steroid therapy and may occur as a terminal event in a variety of diseases.[4,5]

In summary, the findings at autopsy were: hypoplasia of the bone marrow; hepatosplenomegaly with leukemic infiltrates; thrombocytopenic purpura; disseminated Candidiasis involving the lungs and liver; ulceration of the cecum; and acute pancreatitis. All of these changes are believed to be secondary to acute leukemia and the therapeutic agents used.

Mycotic infections as complications of leukemia were rarely encountered prior to the widespread usage of antimetabolites and steroids in the 1950's but have since been recognized with increasing frequency.[6] The majority of these deep-seated fungal infections are due to *Candida albicans* but are unrelated to the cell type of the leukemia or the clinical course (acute or chronic). Other organisms encountered less frequently are Aspergillus, Mucor, Cryptococcus, Nocardia and Histoplasma.[2,6]

In a comprehensive review of the published cases of deep-seated candida infections, Louria[7] divided them into three types. He found that candida meningitis was unrelated to prior antimicrobial or hormone therapy. Candida endocraditis was found in conjunction with antimicrobial therapy in 43% of the cases, but in the majority, it was related to damaged cardiac valves and intravenous injections. None of the patients with either of these forms of candidiasis had leukemia. In disseminated candidiasis, however, hematologic disorders including leukemia, aplastic anemia and multiple myeloma were present in 23% of the patients and 80% had been taking antimicrobials or steroids.

Patients with leukemia have altered defense mechanisms before therapy, partially as a result of neutropenia. The antimetabolites produce inhibition of both the primary antibody response and the development of delayed hypersensitivity, and steroids impair mononuclear cell exudation.[8] This man, as a result of leukemia, diabetes and antimetabolite and steroid therapy, was heavily predisposed to a mycotic infection.

Are there any questions about the autopsy findings?

DR. PERVIS MILNOR: Can you be certain that what produced his clinical picture was not disseminated gram-negative infection which was controlled by the antibiotic therapy which, in turn, might have allowed a further progression of his candidiasis?

DR. J. D. UPSHAW: I don't believe it did because it looked for about 48 hours as if his temperature was coming down but he then stabilized. Whatever was infecting him was not controlled in the last week despite giving him a broad spectrum of antibiotic coverage.

DR. PERVIS MILNOR: In disseminated fungal infections, not only this organism has been cultured but also very frequently blastomycosis and actinomycosis and others have been reported, particularly at Memorial Hospital in New York. Is there a difference between the frequency with which this is seen, with carcinomas on the one hand, the granulocytic leukemias on the other, and lymphocytic leukemias on the third? Here we should have a difference in the involvement of the immune mechanisms. Are we able to see any difference in the incidence of disseminated infections with these uncommon pathogens in these different diseases?

DR. RODGER C. HAGGITT: There apparently is no difference in susceptibility to mycotic infections in the various types of acute leukemia.[2] As for the difference in incidence of disseminated mycotic infections in hematologic conditions versus carcinoma, Hersh, by using a skin window technic, showed that patients with acute leukemia had a quantitative decrease in the inflammatory response even before therapy.

Antimetabolites and steroids could similarly decrease the inflammatory response. Leukemic patients in remission had a normal response, but patients with carcinoma were not tested.

DR. J. D. UPSHAW: I think it is true that people who get good response to the antimetabolites and are in remission rarely, if ever, have disseminated fungal infections.

DR. PERVIS MILNOR: Was this not an unusually long survival for acute stem-cell leukemia?

DR. J. D. UPSHAW: Yes. I think it is most unusual in an adult.

Final Anatomic Diagnoses

Acute leukemia, undifferentiated (stem-cell) type;
Disseminated candidiasis involving lungs and liver;
Acute pancreatitis;
Simple ulcer of cecum;
Thrombocytopenic purpura;
Fatty change of liver.

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* * *

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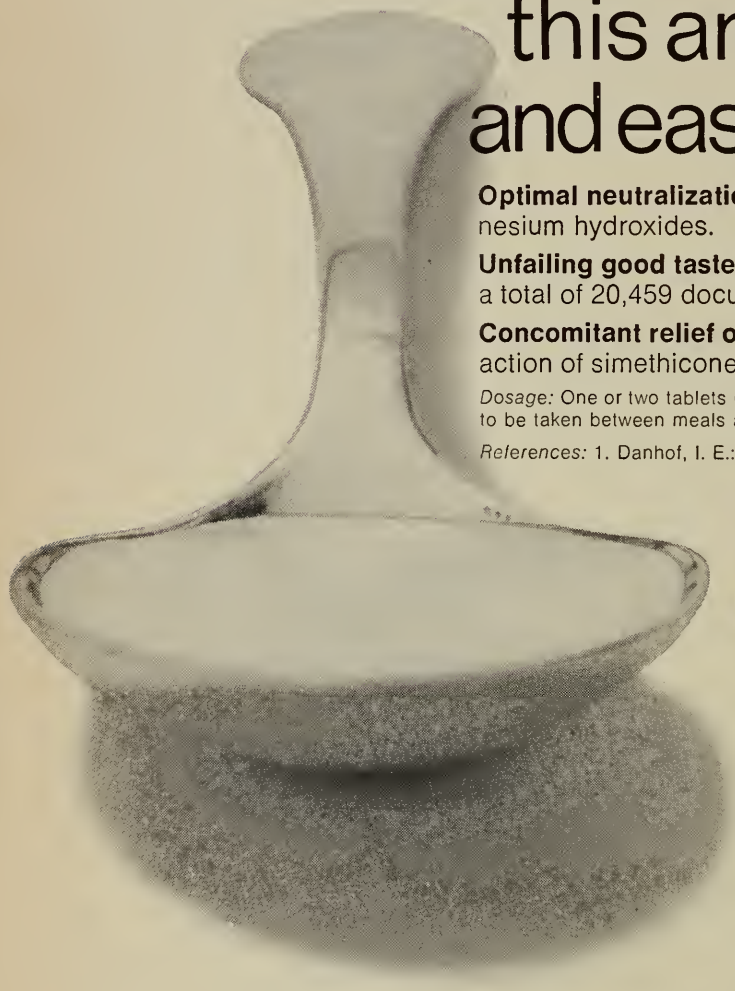
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References: 1. Danhof, I. E.: Report on file. 2. Hoon, J. R.: Arch. Surg. 93:467 (Sept.) 1966.

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From the Executive Director
E. Ballentine

MEDICAL DIGEST

News of Interest to Doctors in Tennessee

NATIONAL GOVERNORS CONFERENCE . . . The Nation's governors, at their recent conference, went on record as favoring a "national universal health insurance program", although about half of the state executives voted—futilely—to change the language of the policy statement . . . An amendment to eliminate compulsion from the statement was sponsored, but it failed for lack of a three-fourths majority. The voice vote appeared about even and a show of hands seemed to give the amendment a simple majority.

* * * * *

POLICY STATEMENT READS . . . "Adoption by the federal government of a national universal health insurance program coupled with hospital cost controls as the primary method of keeping rising health costs from preventing all people from receiving the medical care they need, was the wording of the statement. Such a program should utilize the existing private enterprise medical system . . . Publicly paid programs such as Medicaid should be used only as a secondary program for those who have used up their insurance benefits . . . Several governors who voted against the health insurance policy statement said they objected to its compulsory character. Several believed that governors should not limit themselves to one approach and several doubted how a compulsory system would save any money.

* * * * *

NEW MEDICAL SCHOOLS . . . The nation will have 101 medical schools with the two new schools that will open this fall. Schools are Louisiana State University Medical Center, Shreveport, and Medical College of Ohio, Toledo. With 32 expected to enroll at each new school, total first year students in U.S. schools is estimated at 10,012.

* * * * *

COSTS OF OPERATING A PRACTICE . . . Are rising faster than fees, with overhead increasing at an annual rate of 8%. Office rents are moving up fast in small communities and suburban areas. Salaries of paramedical people employed in doctors' offices are accelerating, since MDs find they must compete with hospitals and other institutions for a short supply. Shortage has led to salary increases of 10% to 15% a year. Need for more clerical help adds to payroll. Physicians also see expensive equipment becoming obsolete, some made necessary by development of simple tests. In two years, cost of supplies rose 18%. Average weekly salary for clerical, stenographic work in offices in U.S. is now up $5 over last year's average weekly pay.

* * * * *

FEES TO PROVIDERS LIMITED . . . The Secretary of HEW has announced that fees paid to physicians and other individual providers of medical services under Medicaid will be limited . . . The HEW regulation will limit payments to providers to those received in January, 1969, unless payments are below the 75th percentile of customary charges. This action will stay in effect until July 1, 1970. The action taken by HEW is to

hold the line on medical costs . . . Evidence must be clear that providers and the states have cooperatively established effective utilization review and quality control systems.

* * * * *

AMA PROGRAM FOR ECONOMIES IN MEDICAID PROGRAM . . . AMA has announced a four point program for refinement and economies in the Medicaid program, emphasizing that the need in meeting health care requirements of the poor is to encourage participation by more MDs rather than fewer. AMA's four recommendations:

1. Vigorous emphasis on review by local medical societies of use made of expensive hospital and nursing home facilities. About 80% of Medicaid costs are for charges for these facilities.
2. Energetic eradication by medical profession of isolated abuses by MDs in making unwarranted charges or other procedures that boost costs. Some medical societies have recommended dropping from Medicaid program any MD providing inadequate care or mischarging. Governments will be urged to pursue civil or criminal actions against offenders.
3. Urge all medical societies and individual MDs wherever possible to bring health services into low-income communities, where it will be more convenient to patients, less expensive.
4. Active review by medical societies to make certain quality of health care provided to everyone is maintained even while cost efficiencies are effected.

* * * * *

PHYSICIANS MAY BE INVOLVED WITH "TRUTH IN LENDING" LAW . . . On July 1, 1969, the new federal legislation referred to as "truth-in-lending" went into effect. Its purpose . . . "The Congress finds that economic stabilization would be enhanced and the competition among the various financial institutions and other firms engaged in the extension of consumer credit would be strengthened by the informed use of credit . . . It is the purpose of this title to assure a meaningful disclosure of credit terms so that the consumer will be able to compare more readily the various credit terms available to him and avoid the uninformed use of credit. This law applies to everyone who extends or arranges for credit for which a finance charge is or may be payable or which is repayable in more than four installments.

This means that:

(1) A physician who extends his own credit to a patient and charges interest or imposes any other finance charge for that credit must fulfill the disclosure requirements of the Truth in Lending Act.

(2) A physician who extends his own credit and charges no interest or other finance charge for that credit will not be subject to the Truth in Lending Act disclosure requirements unless the physician permits the patient to pay the bill in five or more installments. In the definition of "open end credit", if you do not arrange in advance with your patient to extend credit for longer than four installments (usually four months in the case of physicians) you have not established a plan and probably do not have to fulfill the requirement of the disclosure provisions of the law . . . What is meant by disclosure? The law simply provides that if you extend credit and make a financial interest charge, or if you arrange credit and allow the patient to repay you for services rendered in five or more installments, you must tell them in writing that the interest rate and finance charge is, if any, in compliance with Section 226.7 of Regulation Z of the Law.

Public Service

Communications Legislation

Hadley Williams, Public Service Director

COMMUNITY HEALTH WEEK TO BE OBSERVED . . . The week of October 19-25 has been designated as Community Health Week in Tennessee. Governor Buford Ellington officially proclaimed the observance by citing the health and well-being of all Tennesseans as one of the state's most valuable resources. In issuing his proclamation Governor Ellington praised the high quality of health care services and abundance of medical facilities and health resources throughout the state and he paid tribute to the men and women who have dedicated their lives to "helping people" by pursuing one of the more than 200 challenging careers in medicine and its allied fields. "Teaming Up for Better Health" is the recurring national theme of Community Health Week.

* * * * *

EMERGENCY MEDICAL SERVICES STUDY COMPLETED . . . For the past year a team of consultants from the University of Tennessee have been surveying the state to determine the status and availability of Emergency Medical Services across the state. Their findings and recommendations have been compiled and submitted to the Governor's Advisory Committee on Emergency Medical Services. This 21-man committee will evaluate the survey and make their recommendations directly to Governor Ellington. Five physicians are members of the committee. They are: Drs. C. Robert Clark of Chattanooga, Byron O. Garner of Union City, Edmund W. Benz of Nashville, Daniel J. Scott, Jr. of Memphis and James C. Prose of Knoxville who serves as committee chairman. Standards for the licensing of emergency vehicles, firms and vehicle crew personnel and provisions for the regulation of licensing, inspection and operation of emergency transportation vehicles are among the survey team's recommendations. Also recommended is a visual recognition system for locating and classifying hospital emergency departments and development of an emergency medical services communications system designed to coordinate the functions of hospitals, physicians and ambulances. Approximately 100 individual physicians were interviewed during the survey.

* * * * *

PROFESSIONAL CORPORATIONS WIN IRS FIGHT . . . The Internal Revenue Service recently announced that it is "conceding that organizations of doctors, lawyers and other professional people organized under state professional association acts will, generally, be treated as corporations for tax purposes". In the past two years 12 court decisions have shaken IRS and no appeal will be made to the Supreme Court. AMA attorneys

point to timing of IRS announcement and passage by the House of Representatives a tax-reform bill that tightens tax treatment of professional corporations. Under the bill, pension advantages of professional corporations that have elected to be taxed under Subchapter S of the tax code would be limited to benefits not exceeding those available under HR 10 (Keogh Law). A Subchapter S corporation is one that elects not to be taxed as a corporation but to have its income taxed directly to shareholders as if they were partners.

* * * * *

FIXED FEE SCHEDULES SUGGESTED . . . The president of Group Health Insurance, George W. Melcher, Jr., M.D., has been quoted as saying the practice of allowing providers — whether physicians, dentists or hospitals — to determine care and charges must be changed. MDs' fees should be on fixed schedules with "adequate compensation for time spent, not for the number of laboratory or x-ray or other ancillary studies that are carried out in order to justify the fee", he said. While fee for service was being criticized, Montefiore Hospital in New York City announced it was ending a 22-year affiliation of its closed-panel physician group with Health Insurance Plan of Greater New York (HIP) due to losses of $1.5 million in past four years while treating 30,000 HIP subscribers.

* * * * *

AHA TO STUDY NATIONAL HEALTH INSURANCE SYSTEM . . . The American Hospital Association has begun a study on the value of a national health insurance system. Edwin L. Crosby, M.D., executive director of AHA said the committee might recommend "a federal program, a private program, or both." The study as well as the resolution adopted by nation's governors favoring a national universal health insurance program is expected to provide labor leader Walter Reuther's Committee of 100 for National Health Insurance ammunition for their fight to socialize American medicine.

* * * * *

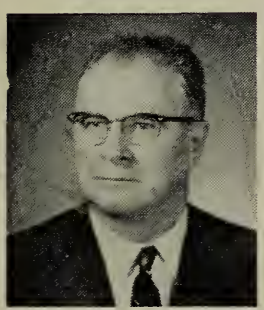
INFLATION NOTES . . . Despite continuing publicity being given to rising medical care costs, it still ranks behind food, shelter, and clothing on the inflation spiral. Statistics from the U.S. Bureau of Labor show that on a 100-point scale for one year, food rose 17.4; mortgage money up 13.9; clothing 11.8 while medical care costs rose 8.2, less than half the rate of food. The medical care costs increase roughly parallels that of the general economy.

* * * * *

DENVER TO HOST AMA . . . The 23rd AMA Clinical Meeting will be held in Denver November 30th to December 3rd with the Denver Hilton Hotel serving as headquarters. As a general practitioner or specialist, physicians will find the Denver winter medical meeting a highly rewarding experience. The October 20th issue of JAMA will give the complete scientific program as well as forms for advance registration and hotel accommodations. Make your plans to attend now.

President's Page

Paradoxes



FRANCIS H. COLE

Medicare, in its wisdom, refuses to pay for immunization for its beneficiaries, apparently committed to the belief that a pound of cure is indeed better than an ounce of prevention.

Medicaid, not to be outdone, specifically eliminates birth control pills from its list of medications, thus helping to insure a continuing supply of clients for its services.

Our government, recognizing a shortage of physicians and urging medical schools to expand, reduces drastically the student loan funds. These loans to be repaid by the student after he becomes established in practice are not as important as grants to friendly or unfriendly nations on the other side of the world.

Graduate education of physicians is largely financed by taxation of sick patients in private hospitals. Teachers and engineers are educated at the public expense or by generous grants from tax exempt foundations. We need teachers and engineers and all other highly trained and educated people, but we also need surgeons, urologists, neurologists, and pathologists, who together with all other medical specialists receive their education under sub-standard living conditions or by subsidy from hard pressed parents or from working wives.

If you exist at the very bottom of the economic scale, you are invited at government expense to seek the advice of any physician on any subject as often as you desire. After receiving examination, consultation, and advice, one is then free to go to another physician, all at no personal expense. If by hard work and good fortune, you rise above the depths of poverty, all these subsidies suddenly and completely end. You are totally on your own.

We need rationality in all these things. We need a new approach in the Department of Health, Education, and Welfare. Physicians have tried to cooperate in these ventures, despite the "Alice in Wonderland" nature of the reasoning, but patience is growing thin.

Sincerely,

Francis H. Cole, M.D.

President

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OCTOBER, 1969

EDITORIAL

LEONARD W. EDWARDS— A TRIBUTE

It becomes the sad duty of the Editor to recognize the death of one of the Past Presidents of the Tennessee Medical Association. But rather than grieve for one who lived four score years, I wish to review the accomplishments of one who devoted this span of life to fulfilling the highest ideals of the medical profession and the Oath of Hippocrates. Thus, his professional life was given to offering his consummate surgical judgment and superb skill to the ill irrespective of society's strata, and to the role of a dedicated teacher. Every move in the professional life of Leonard Edwards was directed to either the welfare and health of Tennessee's people or toward improving the competence of its doctors.

I count it a privilege to have known this outstanding surgeon and to have been associated with him upon occasion in his efforts on behalf of Tennessee's public. Editorial comment permits me to hold high the lamp which will light the path Leonard Edwards walked, a path possibly unclear in hearsay to the younger generation but who, hopefully, may be tempted to follow his footsteps.

Born and reared on a Tennessee farm, Leonard Edwards graduated from the Vanderbilt University School of Medicine in 1912, and after a year as interne in the old Vanderbilt Hospital joined the Drs. Duncan Eve, Sr. and Jr., in their surgical practice from 1912 to 1915, a means of graduate training in the pre-residency days. He then entered into the private practice of surgery and, except for a year (1918-19) in the military service, continued this course until 1938 when he joined Dr. Duncan Eve, Jr. to establish the Edwards-Eve Clinic and in which he remained active to the time of retirement. It was in these surgical experiences that he developed the skills and the judgment that made him the ultimate arbiter in consultation and the surgeon of doctors and members of their families. This earned for him the superlative accolade from Dr. Barney Brooks when he said to me years ago, "Dr. Edwards is the best abdominal surgeon in Nashville." Following the introduction by Dragstedt and Owens (1943) of vagotomy in the treatment of peptic ulcer, Dr. Edwards was one of the first to accept this concept and demonstrate it to a successful conclusion for the benefit of Nashville surgeons and the patients of the area. The new, if of sound principle, was acceptable to this man, a surgeon of vision.

This attribute gave direction to that other facet of his professional life and which he enjoyed immensely—the fulfillment of the role of doctor in its old and fullest sense, as teacher. In charge of the introductory course to clinical medicine in the second year of the Vanderbilt curriculum, I recognized the stimulating experience of the students in their introduction to surgical thinking by this accomplished clinician. The students of Meharry Medical College, too, profited by his teaching for many years. At the graduate level, the establishment of an approved surgical residency at St. Thomas Hospital was Leonard Edwards' doing, and well might he say to me with pride, "Not

one of my residents who elected to take the examination of the American Board of Surgery ever failed." One can only speculate, since it cannot be documented, upon the extension of this program and Dr. Edwards' demands for excellence on the Surgical Service at that Hospital into the continuing education and competence of his colleagues. The impact must have been not inconsiderable.

His interest in improving and expanding the surgeon's place in medicine led to a part in the founding of the Nashville Surgical Society and its presidency in 1943.

To the practitioner of medicine these objective attributes of the complete surgeon ministering to the sick, and the dedicated teacher stimulating the hidden potentials of students are quite easily understood. His contributions to society—some might say his greatest contributions—are much more intangible and by their very nature with results less clearly defined. These were mediated or only made possible through the pathways of what has been named "organized medicine." The accomplishments of Leonard Edwards demonstrate that one of vision, almost clairvoyant, can become one of action by full participation in the committees and governing bodies of county and state medical societies. Here his influence and vision anticipated events of approaching years and placed him steps ahead of those who usually speak for the medical profession.

His roles in the Nashville Academy of Medicine and the Tennessee Medical Association are too numerous to catalogue in detail. Of more importance are the contributions and results of these roles. The outstanding fact and as an example to those who follow, is that this man of professional and scholarly excellence was never "too busy" to accept a duty in "organized" medicine. Without enumerating the many committees and years of service on each, suffice it to say that Dr. Edwards was never without some such role throughout the decades spanned by 1920 to 1960 within which fell membership on the Nashville Academy Board of Directors and the Tennessee Medical Association Board of Trustees, filling the presidency of the Academy in 1931 and of the State Association in 1941. As an outstanding citizen-physician Dr. Edwards merited the respect of lawmakers and through him the strength of the medical profession was recognized. He had a major role in the passage of the Tennessee Basic Science Law in 1941. In 1939, anticipating the profligate spending of tax dollars, he had a hand in legislation requiring that federal, state or other dollars for health be disbursed through a Medical Care Division of the Tennessee Department of Public Health where the expert eyes of medical people might advise expenditures wisely and not emotionally. Also, anticipating the tenor of the times, Dr. Leonard Edwards was the author and exponent of the Tennessee Hospital Indigent Act, enacted in 1953 and soon copied by other state associations, as one of the first recognitions by the "organized" medical profession of its responsibilities to provide care to the needy. It made a misdemeanor a charge by any physician for services during the hospitalization of such a person under county and state funds. Need was established by doctor and judge of the county court.

Equally far reaching were Dr. Edwards' contributions in the extralegal sphere as Chairman of the Committee on Public Service established in 1950 with its program of the *Tennessee Ten*—ten approaches to the improvement of medical care in the State through arousing the profession to take an interest in, and promulgating efforts in extending medical care and apprising the public of this. Of key importance among these ten points was support of the Prepaid Health Insurance Program of the State Association — The *Tennessee Plan* — under which the ultimate number protected reached some 800,000 before its discontinuance about 5 years ago and the increase in governmental underwriting. The impact of the Tennessee Ten in lifting the face of medicine hopefully may have blunted today's denigration of the medical profession by a variety of forces.

As one of the last contributions of this citizen-surgeon to his community was his acceptance for a time (1959-60), the position of Chief of Professional Service and Director of Medical Education of the Nashville

General Hospital. The hospital had lost its approval for internship and residencies. The situation had reached an impasse which only one of Dr. Edwards' stature could solve. It led to the restitution of these programs under the aegis of the Vanderbilt University School of Medicine. For this he was recognized officially and publicly by both the Mayor and City Council of Nashville and the Nashville Chamber of Commerce.

Is there any wonder that the Nashville Academy of Medicine nominated Dr. Edwards in 1966 for the Outstanding Physician of the Year Award and that it was conferred by the Tennessee Medical Association! He has set a challenge to his family's next generation who follow in his footsteps in medicine.

This Editorial has reached an unprecedented length. To shorten it by disregarding outstanding contributions by its subject would impair the portrait for historians of the future who wish to know what manner of man was Leonard Edwards. Too, it must give pause, if read, to those youthful activists who today question the sincerity and accomplishments of former generations. And, finally, as a personal note, I have found it almost impossible to overlook items I have thought important, biased no doubt by admiration, and the rare privilege of having served for years on committees with him and being called to his office upon occasion to discuss personally items for the common good—whether in education, in medical care or in the medical profession. He was one whose influence I shall never forget.

R.H.K.

THE MIDDLE TENNESSEE MEDICAL ASSOCIATION

A diamond anniversary is a momentous occasion. The Middle Tennessee Medical Association is celebrating its diamond anniversary this November at its 150th semi-annual meeting.

Seventy-five years ago a small group of middle Tennessee physicians recognizing the need of an organization for "the advancement of medical knowledge and the promotion of a fraternal feeling in the profession" met in the Senate Chamber of the Capitol in Nashville and elected Dr. J. B. Cowan of Tullahoma as its first president. The Tennessee State Medical Association, founded in 1830, was recognized as the state organization of physicians and it was specifically stated that this new Middle Tennessee Medical Association had been created to work in harmony with the older and larger Tennessee State Medical Association.

Since its inception the Middle Tennessee Medical Association has met twice a year and a large number of the papers presented at its meetings have been prepared by physicians from small towns in middle Tennessee with an intermixture of papers from physicians on the faculties of the old University of Nashville, Vanderbilt University and the University of Tennessee. Almost all the papers have come from Tennessee and most from the middle portion of the state. These physicians have been encouraged to prepare their experiences and their methods of handling problems of practice for the enlightenment of their colleagues. In these days of erudite and technically complicated and expensive studies financed by government, research foundations, and industry, emphasis on important but much less practical aspects of medicine has been the order of the day. The Middle Tennessee Medical Association has emphasized the more pragmatic aspects of medical practice and thus made transfer of important information more readily applicable to the patient.

A review of the programs of the Middle Tennessee Medical Association over the years details the medical history of this section of the country. Each year the program of this organization reflects the problems facing the physicians. Seventy-five years ago fevers were rampant and exotic attempts were made to separate malaria and typhus clinically. Bacteriology was in its infancy and cultures and smears were techniques rarely employed in the diagnosis of infectious disease. Calomel and blood letting were still the standard treatments for most fevers and infections and aseptic surgery was just barely understood. Poorly trained "doctors" and "potion sellers"

worked side by side with educated physicians and the patient suffered. A glance at recent programs of this Association reveals the changing interests, diseases and problems confronting the educated physician today. The advanced surgical techniques, importance of metabolic disorders, the problems of aging, trauma and rational drug therapy clearly demonstrates the rapid strides taken by the medical profession during recent years. More important they clearly show what has been accomplished for the ultimate beneficiary—the patient.

It is gratifying that such an organization has continued to stimulate physicians who are dedicated to provide excellent patient care. Our congratulations to all physicians, past and present, who have been a part of the Middle Tennessee Medical Association.

A.B.S.

IN MEMORIAM

Edwards, Leonard W., Nashville. Died August 28, 1969, Age 81. Graduate of Vanderbilt University Medical School, Nashville, 1912. Member of Nashville Academy of Medicine.



September 4, 1969
Dr. John H. Saffold
Chairman, Board of Trustees
Tennessee Medical Association
605 Walnut Street
Knoxville, Tennessee

Dear Dr. Saffold:

I am writing you in regard to the Medicaid program as presently established by the state of Tennessee. Before and after my telephone conversation with you, I had contacted other doctors closely concerned with this program. I discussed it with Dr. Francis Cole of Memphis, Dr. Oscar McCallum of Henderson, Dr. Julian Welch of Brownsville, as well as with our other local physicians; Dr. John M. Bishop and Dr. Lee Rush, Jr., of my group, and Dr. Karl Rhea, Dr. Frank McKnight, and Dr. Lloyd Plemmons of the other local medical group.

This is a bad bill—It is ill-conceived and poorly prepared for proper execution.

I fail to recognize the validity of the argument that we, "The physicians of Tennessee should go along with the bill because as it presently exists it is doomed to failure and if we have tried to make it work, we cannot be blamed for its failure." I think that a more appropriate argument is that our profession should not permit itself to be used to support a bill so obviously bad and so sure to either completely fail or at least remain very unsatisfactory as to cost, accomplishment, and proper compensation for the already hard-pressed physician.

I think it is our duty to state the facts plainly to the news media and let the chips fall where they may. Inevitably, if we work with the program we will at least take a large share of the blame for the failures and inadequacy.

The question of computerizing the program on a quarterly basis and renegotiating is not valid argument for attempting to go along with the bill because the only renegotiating would be downward since it would require a new appropriation by the legislature to make funds available to go in any other direction.

The question of going along with this bill in the hope of new and better bills coming out of Congress is obviously too nebulous to warrant the risk of aiding and abetting in the crime of perpetrating this program on the state.

The basic philosophy of participating in the program on a rather small percentage or any decrease in usual and customary fees for the physician is wrong because this is a tax supported program and few people pay any more taxes than the physician. Why therefore should the physician in giving his services be taxed twice? If this is to be done then those people who administer the program should also work on the same percentage of salary basis.

The patient load in Fayette County that can be fully expected to qualify under Title XIX will be so large and they will seriously interfere with the care of the regular paying patients as well as taxing the physical resources of the physician without any appreciable compensation above administrative costs of handling these Medicaid recipients.

Finally the current figures for recipients and the projected cost is totally unrealistic. The cost and the number of recipients of benefits will at least quadruple the present figures.

Therefore I wish to say in conclusion that this is a bad program, poorly conceived and poorly prepared and the medical profession of this state should disassociate itself from this program, and not run the risk of sharing in the calamity that it presents.

John L. Armstrong, M.D.

John L. Armstrong, M.D.
The Armstrong Clinic
Summerville, Tennessee

Dear John:

I received your letter of September 4th and

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appreciate your concern and your feeling about this matter. I agree with you heartily that this is a bad bill. It is poorly conceived and not prepared for proper execution. Politically, medicine has opposed this type of legislation with all forces at its command. I agree with you about many of the things which you say relative to the Medicaid Bill.

In discussions about this bill and other bills and other problems of medicine, the Board of Trustees is in the position where it cannot and should not, we feel, act as a union. The participation or not in this bill and in the implementation of medical care under it is one for individual physicians to determine. The position of the Board of Trustees has been that it would attempt to take this bill and do as well as we are able to do with it for the benefit of the physicians who do want to participate. I do not believe that we have constrained anyone to participate in the program but I do feel that it is our responsibility to proceed to make this as palatable as possible to the physicians who do want to participate. This has been our action.

At the point at which we act with the power of organized medicine in constraint of physicians to participate or restraint to keep them from participating in any particular care plan then we shall have misused medicine and its organization which understands physicians to be working as individuals and serving patients on the basis of individual conscience of the physician and the patient. I see no other basis upon which the Board of Trustees or any portion of organized medicine can act.

We are pleased that we have had the cooperation of medicine, of the state administration, of other portions of the medical community, and, particularly, of the people in the Department of Public Health in understanding and helping to develop a program which will permit those doctors who wish to participate to have remuneration throughout the year.

I feel that it is important that organized medicine continue to attempt to produce by legislative methods programs which are acceptable to as many of its members as possible. In this area we have lost many battles but we still have what is in fact the only free medical profession left in the world. I have the utmost respect for the leadership of medicine and for my colleagues on the Board of Trustees. I must say further that I extend this respect to you and to others who feel as you do and I certainly would defend to the limit your right to say the things which you say and to participate or not in this program based on your individual conscience. At the present time the Board of Trustees is pursuing a course which seems to us very clear from the instruction of the House of Delegates by previous activities and actions on resolution. I am sure that all of the membership is already aware of the feeling of many of our members. I shall be happy to hear from you further about this at your discretion.

Please be assured of my continued high regard, I remain

Sincerely yours,
John H. Saffold, M.D., Chairman
Board of Trustees,
Tennessee Medical Association

PROGRAMS AND NEWS OF MEDICAL SOCIETIES

Nashville Academy of Medicine Davidson County Medical Society

The Nashville Academy of Medicine held its quarterly meeting on September 9th at Baptist Hospital in Nashville. The speakers for the night were Dr. Donald Louria, who discussed "Drug Abuse," and Dr. Francis Cole, TMA President, who reported on TMA projects and activities. Dr. Louria, author of "The Drug Scene" and many articles on this subject, is chairman of the Department of Public Health and Preventive Medicine at the New Jersey College of Medicine.

The Academy has updated its program for handling local natural disasters, emphasizing coordination among all groups and agencies involved. Meetings with representatives of the Fire and Police Departments, Civil Defense, Hospitals, Ambulance Services, Red Cross, National Guard, Public Health Department, Welfare Department, and Pharmacies have stressed their respective roles. The main problem has been communications, and a better system is being developed. The Chattanooga Emergency Medical Program has been used as a guide and example of an excellent system.

Roane-Anderson County Medical Society

A meeting of the Roane-Anderson County Medical Society was held at the Oak Ridge Hospital on August 26. The main speaker for the evening was Dr. Cecil Mynatt, Jr., Director of the East Tennessee State Mental Hospital, whose topic was "The Alcoholic Problem." Also, a film entitled "A Disease Called Alcoholism" was shown. The film demonstrated the technique employed in

the alcoholic unit at U.T. Medical School to assist in the total recovery of problem drinkers.

NATIONAL NEWS

The Month in Washington

(From Washington Office, AMA)

A Food and Drug Administration advisory committee found oral contraceptives to be "safe," but reported that British and U.S. studies had established "an etiologic relation between thromboembolic disorders" and their use.

The Advisory Committee on Obstetrics and Gynecology, making its second report on oral contraceptives, said that their benefits outweighed the risks sufficiently to designate them "safe" within the intent of the federal law.

As for the potential carcinogenity of oral contraceptives, the report said no conclusion could be drawn at this time.

The committee called for intensive research along three lines: 1) possible relationship of hormonal contraceptives and carcinoma of the breast and uterus; 2) determination of the basis and prognosis of metabolic alterations produced by hormonal contraceptives; and 3) development of new methods of contraception.

The committee, in its initial report three years ago, approved of oral contraceptives with reservations. It now said that these reservations appear to have been justified because of the adverse reactions reported in both scientific literature and the general press. But the report concluded:

"When these potential hazards and the value of the drugs are balanced, the committee finds the ratio of benefit to risk sufficiently high to justify the designation safe within the intent of the legislation (Kefauver-Harris Amendments of 1962)."

The report said scientific studies "suggest that the mortality from thromboembolic disorders attributable to the oral contraceptives is about three per 100,000 women per year, adding less than three per cent to the total age-specific mortality in users of these drugs." In a U.S. study, the risk of thromboembolism to a woman using hormonal contraceptives was estimated by indirect methods to be 4.4 times that of a non-user.

The report said there is no evidence that any metabolic alterations induced by the oral contraceptives pose serious health hazards.

The effectiveness of oral contraceptives was found to be significantly higher than for intrauterine devices or traditional methods.

★

Abandoning a long court fight, the Internal Revenue Service reversed itself and ruled that organizations of physicians authorized under state professional association laws will be treated as corporations for tax purposes.

The IRS announced that it would not appeal to the Supreme Court two recent decisions by U.S. courts of appeal favoring the professional association. In accordance with these court decisions, the IRS said: "organizations of doctors, lawyers and other professional people organized under state professional association acts will, generally, be treated as corporations for tax purposes."

Forty-two states have such laws which offer tax benefits, including deferment of the tax on pension plan contributions until retirement.

The court controversy over IRS treatment of the professional associations for tax purposes dated back to the early 1950's. It was given a "Kintner" label in 1954 when an appeals court ruled in favor of the professionals in a case brought by Arthur Kintner, M.D., Missoula, Mont.

★

The federal government has started a program designed to increase enrollment in the nation's schools of medicine and osteopathy by 4,000 over the next four years.

Known as the Physician Augmentation Program, the activity, under the Department of Health, Education and Welfare, supports the addition of 1,000 first year places commencing with the fall term of 1970. These places are in addition to any increase to which the schools have already committed themselves. Total enrollment

through this program is expected to be about 4,000 in the fourth year of operation. The Physician Augmentation Program is authorized under the Health Manpower Act of 1968.

Grants will be awarded on a national competitive basis to those schools of medicine and osteopathy that document their intention to institute a major increase in their first-year enrollment and that appear to have the greatest potential for achieving major increases with their own resources as supplemented by funds allocated by the program.

★

Robert H. Finch, secretary of Health, Education and Welfare, proposed that state Medicaid administrators work more closely with state medical societies on cost control in the federal-state health care program.

He also said that the states should review more claims in efforts to control medicaid costs.

Finch gave his views on controlling Medicaid costs in a letter to Sen. Abraham Ribicoff (D., Conn.) who had asked what was being done and what additionally could be done about rising expenditures in the program.

In answer to a question as to what states "could be doing under existing law to control Medicaid costs more efficiently," Finch said:

"One answer is to spend more money on the claims review function. For example, there are two states where annual Medicaid expenditures are in excess of one hundred million dollars. One employs seven people for its review function, the other employs seventy. The latter state has very effective control over costs and utilization.

"But I am coming to believe that a major factor is the degree to which physicians are involved in the program, not simply as purveyors of medical care but also as watchdogs of costs and guardians of quality. They generate the bulk of Medicaid expenditures. They authorize admissions to hospitals and skilled nursing homes and they write prescriptions. The need for genuine physician participation in controlling costs is self-evident. A state Medicaid administrator would be well advised to make extensive use of his medical advisory committee and to engineer the plan in detail through the state medical society."

As to what states already are doing, Finch said:

"Some states are using prior authorization of service (emergencies excepted). Some use fee schedules. Some use audit tolerance levels. Some incorporate parameters of medical care into their data processing systems. Some develop client and purveyor profiles. Some use computers to process claims. Others contract the review function to a fiscal agent, e.g., a Blue Cross plan. Some use a medical audit and some have been doing very little."

Ribicoff said in his letter to Finch that he understood "there is very uneven performance of Medicaid program review throughout the nation."

Peer review under leadership of state and county medical societies has top priority in the American Medical Association recommendations for controlling costs in both Medicaid and Medicare. A report of the AMA board of trustees approved by the house of delegates at the 1969 annual convention in New York strongly urged that:

—"Peer review be assigned the highest priority by the state and county medical societies; that where existing mechanisms exist, they be strengthened, and where they do not, they be promptly established.

—"Quick and decisive action be taken, in appropriate fashion, to discipline those few physicians determined after investigation to be abusing medicare and medicaid, either fraudulently or otherwise."

The AMA recommendations for cost control in government health programs also include:

—"The promotion of innovative health service delivery systems for low income communities with emphasis on ambulatory care.

—"Programs by local medical societies to insure preservation of quality health care in the face of cost containment measures."

MEDICAL NEWS IN TENNESSEE

The University of Tennessee Medical Units

The American Physical Therapy Association, at its July meeting, extended full approval to the Medical Unit's School of Physical Therapy. The Association's action followed a series of visits to the Medical Units by a joint American Medical Association-American Physical Therapy Association survey team. Accreditation means that graduates of the school are eligible to practice throughout the country; graduates previously were recognized on a provisional basis, subject to the school's eventual accreditation.

The University of Tennessee School of Physical Therapy, directed by Richard Barnes, serves, in addition to Tennesseans, residents of several southern states having no physical therapy school. Seven students presently are enrolled in the course, and Mr. Barnes anticipates that this enrollment will more than double for the Fall quarter. The increased enrollment, however, still will not meet nation-wide demands for qualified physical therapists, rising rapidly as a result of the Medicare program.

★

Dr. Charles C. Verstandig, an alumnus of the University of Tennessee Medical Units and now a practicing radiologist in Connecticut, has donated $5,000 to the College of Medicine to sponsor an annual lecture in memory of his late wife. Dean M. K. Callison of the College of Medicine, said that the first lecture of the series probably will be held next spring. A previous gift from Dr. Verstandig made possible the Verstandig Award, presented to the student in each graduating class who has overcome the greatest difficulties in completing the professional education.

Vanderbilt University School of Medicine

Earl W. Sutherland, Jr., M.D., Professor of Physiology at the Vanderbilt University School of Medicine, received the Fourth Torald Sollmann Award in Pharmacology today at the meeting of the American Society for Pharmacology and Experimental Therapeutics. The award to Dr. Sutherland, who is a world authority on the mechanism by which adrenalin acts on cells, was presented during the Society's annual meeting recently at the University of Pittsburgh. The Sollmann Award, comprised of $2,500 and a bronze metal, is presented every three years and sponsored by Wyeth Laboratories.

Dr. Sutherland has been Professor of Physiology at Vanderbilt since 1963. Previously he was Professor of Pharmacology and Director of the Department of Pharmacology at Western Reserve University.

PERSONAL NEWS

Dr. Jack C. Neale, III, of Memphis has been appointed Superintendent of Western State Psychiatric Hospital, to succeed **Dr. James Druff.** Dr. Neale has been Director of Diagnosis and Evaluation at the Arlington Hospital and School for the Retarded since January. A graduate of the University of Tennessee Medical School, he served as Chief Psychiatrist for several mental health centers, and was clinical director of Western State Hospital in Hopkinsville, Kentucky.

Dr. Homer F. Marsh, Chancellor of the University of Tennessee Medical Unit, was principal speaker at the August commencement exercises at the University of Tennessee at Martin.

Drs. Joe Campbell and **Laurence Jones** of Union City were the guest speakers of the Martin Rotary Club recently. The physicians discussed their experiences with the pacemaker.

Dr. Ernest A. Turpin, Jr., Bristol, recently announced the opening of his office for the practice of pediatrics.

Dr. Joseph V. Simon, Pediatric Hematologist at St. Jude Children's Research Hospital, attended the 12th International Congress of Blood Transfusion in Moscow, in August.

Dr. Harry G. Brown, Clinical Professor of Pathology at Vanderbilt School of Medicine, and **Dr. Richard D. Buchanan**, Chief of Laboratory Service, Veterans Administration Hospital, were program participants at the recent Ninth Annual Convention of the Southern Association of Cytotechnologists.

Dr. Charles W. Gross, Professor of Otolaryngology and Maxillofacial Surgery at the University of Tennessee, was appointed to the standing committee on educational methods of the American Council of Otolaryngology.

Dr. Lloyd Elam, President of Meharry Medical College, was a featured speaker at a recent meeting of the Nashville Rotary Club. He urged community support for Meharry which is now engaged in a four-year, $88 million fund raising campaign.

ANNOUNCEMENTS

Calendar of Meetings, 1969-70

State

Nov. 5-7	Tennessee Academy of General Practice, Civic Auditorium, Gatlinburg

National

Nov. 6-8	American Society of Cytology, Palmer House, Chicago
Nov. 10-13	Southern Medical Association, Atlanta
Nov. 10-14	American Public Health Association, Civic Center, Philadelphia
Nov. 13-15	Southern Thoracic Surgical Association, Mayflower Hotel, Washington, D.C.
Nov. 13-18	American Heart Association, Memorial Auditorium, Dallas
Nov. 14-15	American College of Physicians' Regional Scientific Meeting, Sheraton-Nashville Inn, Nashville
Nov. 17-21	World Mental Health Assembly, Hotel Shoreham, Washington, D.C.
Nov. 30-Dec. 3	American Medical Association (Clinical Convention), Denver
Dec. 6-11	American Academy of Dermatology, Americana Hotel, Bal Harbour, Florida
Dec. 7-9	American Society of Hematology, Sheraton Hotel, Cleveland
Dec. 8-10	Southern Surgical Association, The Homestead, Hot Springs, Va.
Jan. 11-14	Society of Thoracic Surgeons, Regency Hyatt House, Atlanta
Jan. 17-22	American Academy of Orthopedic Surgeons, Palmer House, Chicago
Jan. 30-Feb. 1	Southern Radiological Conference, Grand Hotel, Point Clear, Alabama

21st Annual Scientific Assembly Tennessee Academy of General Practice

The 21st Annual Scientific Assembly and Congress of Delegates of the Tennessee Academy of General Practice will be held on November 5, 6, and 7, 1969, at the Civic Auditorium in Gatlinburg, Tennessee. The speakers scheduled for the two-day scientific program are: Norman O. Rothermich, M.D., Specialist—Internal Medicine, Columbus Medical Center, Columbus, Ohio; Malcolm Foster, M.D., Specialist—Infectious Diseases, Prevention & Control Center, St. Louis, Missouri; Fridolin Sulser, M.D., Professor of Pharmacology & Psychiatry, Vanderbilt University, Nashville; Thomas A. Stamey, M.D., Professor of Surgery, Stanford University Medical Center, Stanford, California; Roger F. Palmer, M.D., Professor of Medicine; Chairman, Division of Clinical Pharmacology, University of Miami Medical School, Miami, Florida; Irving B. Perlstein, M.D., Specialist—Internal Medicine, Medical Plaza, Louisville, Kentucky; Samuel M. Feinberg, M.D., Specialist—Allergy, Winnetka, Illinois; Charles M. Howell, Jr., M.D., Bowman Gray School of Medicine, Winston-Salem, North Carolina; and Samuel L. Portman, M.D., Instructor, Department of Obstetrics and Gynecology, Ohio State University School of Medicine, Columbus, Ohio.

The annual banquet is scheduled for Thursday evening at the River Terrace Motel. During the banquet, the General Practitioner-of-the-Year Award will be presented and officers for the upcoming year will be installed.

There is no registration fee, and rooms can be reserved by writing the Housing Bureau, Chamber of Commerce, Gatlinburg, Tennessee. The program is acceptable for 13 prescribed hours of credit by the American Academy of General Practice.

University of Tennessee Continuing Education Course

The Division of Continuing Education and Conferences of the University of Tennessee announces that a conference on "Infections Control in Hospitals and Institutions: Administrative" will be held on October 24 and 25, 1969, at the Holiday Inn-Rivermont in Memphis. The purpose of the conference is threefold: (1) to acquaint the audience with the magnitude and complexity of the existing problem, (2) to present principles and methods for surveillance, prevention, and control of infections, and (3) to motivate participants to strengthen infection control programs already existing within the institutions and to initiate new programs designed to deal more effectively with infections.

For further information and registration for this conference, please write Mr. Wallace H. Mayton, Director, Division of Continuing Education and Conferences, University of Tennessee Medical Units, 62 South Dunlap Street, Memphis, Tennessee 38103.

Southern Medical Association Annual Meeting

The 63rd Annual Meeting of the Southern Medical Association will be held November 10-13, 1969,

in Atlanta. The meeting will feature 21 scientific sessions, with each specialty presenting its own program. The special guest speaker for the President's Luncheon will be Grover A. J. Noetzel, Ph.D., Economist, Professor of Economics, University of Miami.

Please write the Southern Medical Association, 2601 Highland Avenue, Birmingham, Alabama 35205, for information on housing and registration.

Symposium on Instruction of Diabetics

An all-day symposium for nurses, dietitians, interested physicians and others with the theme, "Educating and Instructing Diabetic Patients in Their Disease" is to be presented at Vanderbilt University, Nov. 5. An outstanding program has been planned and guest participants include: Miss Julia Watkins, Assistant Professor, Department of Public Health Nursing, University of North Carolina School of Public Health, and Miss Florence Ruhland, R.N., M.Ed., Director of Nursing Education, Diabetes Detection and Education Center, Minneapolis, Minnesota. The program will include formal lectures and discussion group with luncheon planned at the University Club of Nashville. Registration forms will be mailed in the near future for your convenience.

Physicians Newly Licensed in Tennessee

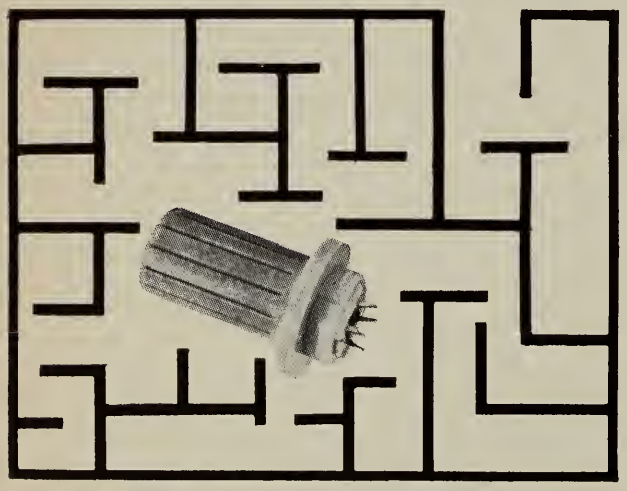
The following physicians have been licensed to practice medicine in the State of Tennessee:

Stanley W. Erwin, Nashville
Richard C. Gilmartin, Jr., Memphis
Orval E. Riggs, Little Rock, Arkansas
Edward J. Battersby, Nashville
William C. Patton, Chattanooga
J. Bruce Woods, Oak Ridge
Robert R. West, Memphis
Roger R. Grimm, Alpine
Joseph T. McLamb, Nashville

ACP Meeting in Nashville

Specialists in internal medicine from Tennessee and Kentucky will hold a scientific meeting at the Sheraton-Nashville Inn, Nashville, Tennessee, November 14-15, under the auspices of the American College of Physicians (ACP). The session is one of thirty-five Regional scientific-educational meetings the ACP will sponsor during the 1969-70 academic year. Held throughout the United States and Canada, the meetings help the College's 15,000 members to keep abreast of developments in the basic sciences and clinical medicine. Special guests at the meeting will be Samuel P. Asper, M.D., Baltimore, Maryland, ACP President and Professor of Medicine at Johns Hopkins University School of Medicine.

The meeting is under the general direction of Hall S. Tacket, M.D., Memphis, Tennessee, ACP Governor for Tennessee and Clinical Professor of Medicine at the University of Tennessee College of Medicine in Memphis.



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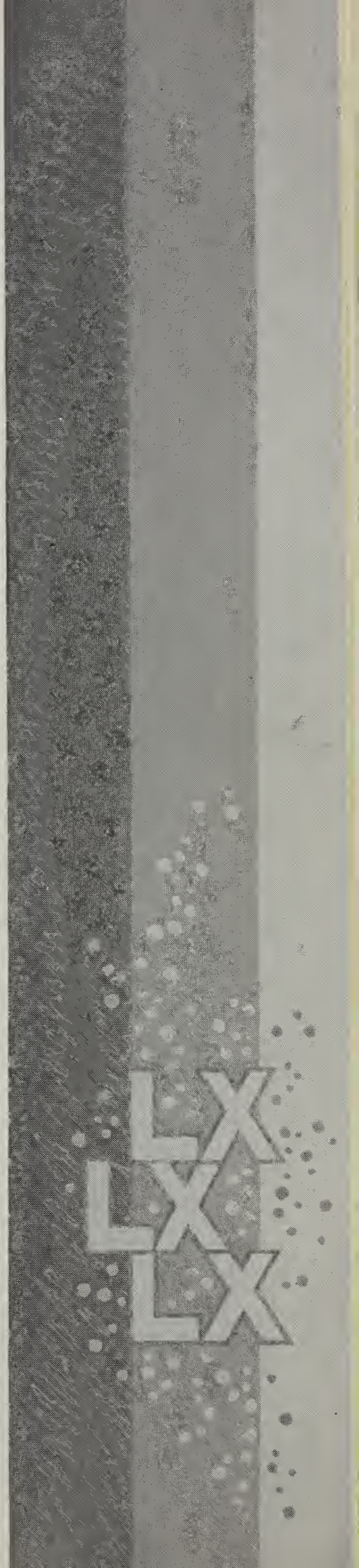
No untoward side effects have been reported to date.

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References:
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Instructions to Contributors

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Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

If reprints are desired, the requested number should be indicated in the latter accompanying the manuscript. The author will be billed by the publisher.

Journal of the Tennessee Medical Association
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The author reports on a rare congenital anomaly affecting several members of one family.

DISTICHIASIS AND EPICANTHUS: A Study of One Family*

ALICE R. DEUTSCH, M.D.,† Memphis, Tenn.

Distichiasis refers to an accessory row of lashes along the posterior border of the lid margin at the place of the openings of the meibomian glands. It is a rare congenital anomaly. The original term was suggested by E. Fuchs,[1] in 1889. He pointed out that this congenital condition should be differentiated from trichiasis, which represents distorted and misdirected normal lashes, following cicatrization of the lid's border. In a typical case of distichiasis, no tarsal secretion is present and no secretion can be obtained by massaging the lid margin. The absence of the meibomian gland structure is revealed by close inspection. In its place thin, fine, and little pigmented, occasionally brittle lashes are seen sprouting out isolated or in a row. The number of these accessory cilia varies. They may be represented by just a few lashes, or they may equal in numbers the meibomian glands, namely about 25 in the upper and 20 in the lower lids. They may be present in all 4 lids or in the lower lids only; even more rarely, they are limited to the upper lid. Examination of excised pieces of lid margin shows that each aberrant eyelash corresponds in location to a gland whose excretory duct should open into the hair follicle. The glands, similar to sebaceous glands are connected with the upper half of the hair follicle, but have in some places the structure of meibomian glands. In others the glands are not fully developed and appear rudimentary. Unusually well developed Moll's glands at the posterior row of the pseudocilia are observed, frequently. An increased number, even a double row of Krause's glands are seen occasionally in the tarsus. Some authors (Kuhnt[3] and Hernheiser[4]) considered distichiasis to be a heterologous developmental anomaly (a true or specific mutation) in which the meibomian glands are replaced by rudimentary cilia. Other authors favor an atavistic etiology, as this phenomenon is common in animals. The highly modified meibomian glands are regarded as being replaced by a more primitive structure. The rarity of this anomaly is documented by Brailey's[2] report. He only found 4 cases during a period of 20 years when he surveyed the Vienna Eye Clinic which has a patient number of 20,000 annually.

A strong hereditary factor is emphasized in most reports. Pico[5] reported 10 cases in 3 successive generations in one family while Calmettes, Deodati, and Bec[6] reported 4 cases in 4 successive generations in one family. In another family they observed 4 cases in 3 generations. Concomitant congenital anomalies were ectropian (Pico), ptosis (Rasanhaja-Turhija[7]), and maxillofacial dysostosis (Halberg and Parmessa[8]). The treatment of distichiasis has not been especially satisfactory; probably because of the rareness of the condition and because follow-up examinations and comparisons have been limited. Only single cases usually are observed by individual authors. Simple epilation is of some value when not too many lashes are present. Nevertheless, it needs to be repeated frequently; electrolytic epilation also was done. This latter procedure, however, promotes pronounced

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*Read at the meeting of the Tennessee Academy of Ophthalmology and Otolaryngology, April 10, 1969, Gatlinburg, Tenn.

cicatrization and entropian when many lashes have been attacked simultaneously, unless the operating microscope is used as suggested by Scheie and Albert.[9] Other surgical procedures are resection of the cilia-bearing marginal strips and conjunctiva with and without grafting of buccal mucous membrane. The ultimate results of these procedures and long time results have not been recorded. In 1962, Fox[10] described a new surgical technique which consisted in complete mobilization and excision of a tarsoconjunctival flap and adequate specific closure. This operation was very successful. In spite of the fact that it referred to only one case, it was reported to encourage its use in similar cases.

Case Studies

This report was stimulated by the examination and follow-up observation of a now 45 year old woman of Jewish descent and her 3 daughters.

The *mother* had bilateral distichiasis of the lower lids, a mild epicanthus tarsalis, decreased length of the palpebral fissures (2.5 cm), and high myopia. An electrolytic epilation was done as two separate procedures on both lower lids which only left several lanigo-like cilia. These did not bother her. Her corneas were clear. The Schirmer test revealed a mild decrease in tear production. The fundus of the left eye showed a temporal crescent; the right eye also had a hemorrhagic central chorioretinal lesion. Her vision equalled: OD= –5.25 –.75 X 80 = 20/70, OS= –5.25 –.50 X 50 = 20/20. The patient gave the information that her father and one of his brothers had a similar lid anomaly and that the same was true for 2 of her brothers and one sister. One of her brothers and her sister died in a German concentration camp. One brother, afflicted with distichiasis and epicanthus, lived in New York City. He has an only son who does not have the lid abnormality.

The *eldest* of the patient's 3 daughters is now 17 years old. She does not have the anomaly. Her Schirmer test is normal, refraction equals: OD= –4.50= 20/20, OS= –4.75= 20/20. She wears contact lenses without discomfort. Her fundi are normal.

The *second daughter* is now 12 years old. She had a Klumpke's paralysis of the right brachial plexus at birth referred to a difficult delivery. There was an incomplete Horner's syndrome present which disappeared during the following years. Her palpebral fissures measured 2.4 cm. Distichiasis and an entropion kept both eyes continuously irritated, but did not cause corneal ulceration because of the fine structure of the cilia. A bilateral entropion operation was done when the child was 6 years old; a skin spindel and a marginal muscles band were resected. This corrected the position of the lower lids, but still did not prevent the secondary lashes of the inner third of the lower lids from brushing against the globe. They, therefore, were removed by electrolytic epilation. The child's refraction equals: OD= –4.00 –1.25 X 120 = 20/20, OS= –3.25 –.87 X 80 = 20/20. Her Schirmer test is normal. No fundus abnormalities are present.

The *youngest daughter* now 10 years old, presented not only a distichiasis and epicanthus, but also alacrimia. Her palpebral fissures measured 2.2 cm. Other isolated elements of the Day-Riley syndrome, namely, blotching of the skin, underdeveloped fungiform and vallate papillae on the root of the tongue were also present. She, furthermore, was very sensitive to 2.5% mecholine hydrochloride, which caused a remarkable miosis of the pupils. This child was very difficult to handle, having a continuous thick, mucoid discharge, small marginal, corneal ulcers and several abscesses of the lid margin. She also had frequent colds. She is allergic to methulose. Locke's solution had to be used continuously. Ten percent sodium sulfacetimide solution was well tolerated whenever the cornea showed infiltrations. However, an astounding progressive improvement has taken place unexpectantly during the last 4 years. No severe irritations of the lid were observed during this period. The conjunctiva appears to be moist and a thin corneal tearfilm is present, in spite of a strongly positive Schirmer test. The second row of very light, silky lashes brushes against the cornea, but the cornea is clear and only the inferior limbal area shows some epithelial irregularities. The sensitivity of the cornea is definitely decreased. The epicanthus is less pronounced than previously. (The same was true for her older sister.) This coincides with the experience of other authors describing a steady decrease of epicanthus with body growth. The child is also less aggressive and more cooperative now.

In spite of the fact that chromosal aberrations are most often connected with mental retardations or mental abnormalities, which are not present in the family under discussion, the patient and her family were sent to Dr. R. L. Summit, pediatric consultant for endocrinology. He kindly examined the family, and stated that, "as a rule, when chromosal abnormalities are present, involving a net loss or gain of chromosal mass, multiple system involvement pertains. He knew of no chromosal abnormality involving net loss or gain of autosomal material which is not accompanied by significant mental retardation and that no well founded chromosal abnormality was found in which the anomaly was restricted to one system." Dr. Summit, therefore, thought that chromosome studies in this family were not indicated.

Comment

The 4 members of this family had a com-

plete examination of the external eye, ophthalmoscopy and refraction. Field studies were done as soon as the children were old enough to cooperate. The same was true for tonometry. Furthermore, the length and height of the palpebral fissures, the intercanthal distance, and the relationship of the internal and external canthus were recorded. Only details important to distichiasis and epicanthus, however, were discussed in this paper. There was no history of consanguinity in this family. Two brothers and one sister of the mother had died in concentration camps. It was not possible to have examinations of the brothers living in New York.

The pedigree of this family referring to distichiasis gives evidence that an autosomal mutant gene was segregating. (Fig. 1)

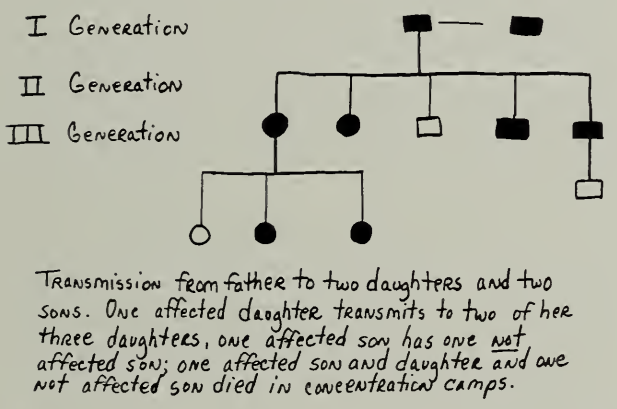


Fig. 1. Dominant Autosomal Inheritance—Pedigree in Distichiasis-Epicanthus

This abnormal gene shows a high degree of penetrance. There are multiple affected individuals in several generations, and there is equal involvement of both sexes. While distichiasis is extremely rare, epicanthus in its various forms is a common abnormality. It is inherited as a dominant, occasional irregular type of heredity. It improves frequently during the first years of life. It is a racial characteristic for the mongolian race. For isolated alacrimia and complete or partial familial dysautonomia, simple autosomal inheritance is characteristic.

In spite of a detailed investigation, no case of alacrimia was ever seen in either the mother's or the father's family.

Summary

The history of a family referring to 3 generations was reviewed. Eight members suffered from congenital distichiasis of the lower lids and epicanthus. Four members only were examined personally by me. The mode of inheritance is evidently of an autosomal dominant type. The youngest member of this family also had alacrimia. This latter abnormality could not be traced to ancestors of either parent.

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The authors in outline form describe tests for thyroid function, the advantages and disadvantages of the several tests and explain the discrepancies which may be encountered.

Thyroid Function Tests*

T. C. MOSS, M.D., and C. C. FARROW, M.D.,* Memphis, Tenn.

Within the last few years several new tests of thyroid function have been developed, most of which are excellent tests, but sometimes give confusing or apparently contradictory results. This review describes some of the tests for thyroid function and attempts to clarify some of the apparently confusing or contradictory results, and to make recommendations for use of the tests.

Basic thyroid gland physiology. The thyroid gland produces its hormone by combining iodine with the essential amino acid tyrosine.[1] Iodine enters the body chiefly through the intestinal tract, but can enter through the skin or mucous membranes. About 30% of ingested iodine is trapped in the thyroid gland, and almost all of the remainder is eliminated by the kidneys, though the salivary and sweat glands excrete some iodine. The iodine trapped in the thyroid gland is oxidized to mono and diiodotyrosine which are the building blocks for thyroxine (T-4) and triiodothyronine (T-3), the metabolically active thyroid hormones. Small quantities of other iodine containing compounds are produced by the thyroid gland but are not important except in dyshormonogenesis (production of metabolically inactive thyroid secretions) which sometimes occurs as a congenital error of metabolism, and sometimes occurs in autoimmune thyroid disease such as Hashimoto's struma, and in acute and subacute thyroiditis. Thyroxine and triiodothyronine are stored in the thyroid acini loosely bound to thyroglobulin from which they are released ino the circulation by enzyme action.

In the circulating blood the thyroid hormones exist chiefly bound to thyroid-binding globulin (TBG) and to thyroid-binding prealbumen (TBPA) to some extent in the case of thyroxine. Thyroxine is present in about 10 times the amount of triiodothyronine, but since triiodothyronine is more loosely bound to TBG than thyroxine and metabolically a much more active compound its physiologic effect is almost equal to that of thyroxine. It is only the free unbound thyroxine and triiodothyronine which is responsible for the physiologic effects of thyroid hormones, but the free hormones are present in infinitesimal amounts, as they have about 1/2,000 the value of the bound hormones.

The thyroid stimulating hormone (TSH) of the pituitary gland affects all stages of thyroid gland activity from trapping of iodine, to hormone synthesis, storage, and release. The production of TSH by the pituitary gland is controlled by a feed back mechanism whereby high levels of thyroid hormone in the circulation suppress the production of TSH.

Protein Bound Iodine Test (PBI)

This is the most commonly used thyroid function test, and since it is about 90 to 95% accurate in hyperthyroidism and about 87% accurate in hypothyroidism it is an excellent test.[2]

Principal of the test. It measures the iodine bound to thyroid-binding globulin and to thyroid-binding prealbumen. Thyroxine and triiodothyronine compose the overwhelming bulk of this measurement with thyroxine about 10 times as abundant as triiodothyronine. A few other iodine-containing thyroid compounds are present, but ordinarily they are in very small amounts. The level of thyroid-binding globulin and prealbumen are important in this test since anything which elevates these serum proteins will cause a high PBI and anything which lowers TBG and TBPA will cause a low PBI. Fortunately the majority of individuals have a normal TBG and TBPA. However, some individuals have congenitally high or low TBG, and pregnancy, estrogens, and birth control pills are known to cause a high TBG resulting in an elevated PBI. Debilitating diseases, androgens and

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nephrosis can lower TBG and cause a low PBI for that reason. Some drugs such as Dilantin and salicylates may compete with thyroid hormones for binding sites on TBG and thereby lower the PBI.

Advantages of the test: The test gives accurate results in the overwhelming majority of individuals, is an in vitro test, easily automated, and is inexpensive.

Disadvantages of the test:

(1) Iodine contamination. Unfortunately iodine is present in many drugs, and any preparation taken internally, rubbed on the skin, or applied to the mucous membranes is suspect in regard to iodine content until proved innocent. Perhaps caugh medicines and multivitamin preparations are the worst offenders. Radiopaque contrast media used in roentgenology render the test useless. Iodized salt does not affect the test. Usually the laboratory detects iodine contamination in performing the PBI and substitutes a test less likely to be affected by iodine contamination, using the original blood specimen, and often without making additional charge.

(2) Elevation or lowering of thyroid-binding globulin. High TBG gives a high PBI and a low TBG gives a low PBI. Elevation of TBG is more common than lowered TBG and is usually due to the estrogens of pregnancy, birth control pills, or estrogen therapy. Nephrosis, debilitating diseases, ACTH, cortisone, and androgens lower the TBG.

(3) Competition of some drugs such as Dilantin and salicylates for binding sites on TBG ordinarily occupied by thyroid hormones. A low PBI results.

(4) In dyshormonogenesis metabolically inactive thyroid substances are measured by the PBI test and the test will result in a higher PBI than the clinical status warrants.

I^{131} uptake test. This test is an excellent test of thyroid function and has itself withstood the test of time.[3]

Principle of the test. This is a radioisotope test which measures the iodine trapping ability of the thyroid gland. A radioisotope of iodine is given and the amount of the isotope taken up by the thyroid gland is measured, often at 6 and 24 hours.

Advantages. It is the only test commonly used which measures the iodine trapping ability of the thyroid gland, it is easily performed, and the results of the test closely conform to the thyroid status of the individual especially in hyperthyroidism.

Disadvantages:

(1) The test uses an in vivo isotope which is objectional to some, it is time consuming, and relatively expensive.

(2) Iodine preparations interfere with the test and radiopaque contrast media are especially serious offenders. Iodine causes a low radioactive iodine uptake test (RAI), whereas the PBI is elevated in iodine contamination as we have previously seen. The total body iodine must be normal to obtain an accurate I^{131} uptake test.

(3) Variations in intrathyroidal stores affect the uptake of iodine. Thyroiditis may decrease the stores and lead to a high radioiodine uptake.

(4) Drugs which block oxidation and organic binding of iodide decrease the I^{131} test results during administration, but after cessation of the drug there is a rebound effect with a high uptake of iodine. Thiouracil, sulfonamides, and PAS may act in this way.

(5) Renal and cardiac diseases cause interference with the test due to decreased iodine clearance.

Other Useful Radioisotope Thyroid Function Tests

T-3 Suppression Test. Small doses of T-3 given over several days will suppress the radioactive iodine uptake test to less than 50% of the original uptake in normal persons, but will have little effect in Graves disease, or in autonomously functioning toxic nodules in nodular goiter. This is an excellent test to detect borderline cases of hyperthyroidism.

TSH Administration Test. Hypothyroidism secondary to pituitary disease responds with a high radioiodine uptake test 18 to 24 hours after administration of thyroid stimulating hormone, whereas in primary hypothyroidism the uptake of iodine is little affected by TSH administration.

Thyroid Scan. The radioactivity of various portions of the thyroid gland can be ob-

tained by a scanning procedure after administration of radioactive iodine. This procedure can detect "hot" nodules of hyperactive thyroid tissue, can detect "cold" nodules which are sometimes malignant in solitary nodular goiter, and can be used to detect thyroid tissue in abnormal positions.

T-3 Test. This test is also a radioisotope thyroid function test but is given special emphasis because of its frequent usage. It is the first practical thyroid function test developed which avoids most of the pitfalls of iodine contamination. I^{131} labeled triiodothyronine is used in the test.

Principle. An excess of I^{131} labeled T-3 is incubated in vitro with the serum to be tested. The T-3 will bind only to those sites on thyroid-binding globulin not already occupied by thyroxine and triiodothyronine. Unbound sites are usually referred to as UTBG. The binding of the radioactive T-3 is directly proportional to UTBG. A resin with a low affinity for T-3 is added and takes up all the I^{131} labeled T-3 not bound to thyroid-binding globulin. Radioactivity of this resin is determined. It is inversely proportional to the unbound thyroid-binding globulin and theoretically directly proportional to the amount of thyroid hormone present.

Advantages. The chief advantage of the test is that it is not affected by inorganic iodides or by some radiographic contrast media. It corresponds well with the PBI in accuracy. Some pregnant patients who habitually abort will not show a lowered T-3 in contrast to normal pregnancies. Cases of hypothyroidism with a normal PBI but elevated unbound thyroid-binding globulin are disclosed by the T-3 test, and in abnormalities of thyroid-binding globulin synthesis the T-3 test is of value.

Disadvantages:

(1) The effect of variations in thyroid-binding globulin (TBG). High levels of TBG give a low T-3 uptake indicating hypothyroidism, and low levels of TBG give a high uptake indicating hyperthyroidism. This is the reverse of the effects of high and low TBG on the PBI and T-4 tests. Pregnancy, birth control pills, and estrogen therapy thus all result in a low T-3 uptake indicating hypothyroidism. Other conditions which may affect the level of TBG in the serum have been discussed under the PBI test.

(2) Iodine contamination continues to be a problem in the case of radiographic contrast media.

(3) The test is an indirect measurement of thyroid hormones and is thus affected by more factors than affect direct measurements of the hormones.

T-4 Test. This test has gained in popularity due to improvements in the method, because it is not affected by iodine contamination except for some radiographic contrast materials, and because it does not measure some inactive iodine containing thyroid secretions. The test actually measures both thyroxine and triiodothyronine, but since thyroxine is the predominant hormone measured the test bears the name of T-4.

Principle. By elevating the pH of the serum in gradual steps it is possible to elute unwanted iodides and release the thyroid hormone to attach itself to a resin which is added. The only iodides which contaminate the test are some radiographic contrast media, and they are easily detected as contaminants in the method. This ready recognition of contamination by iodine is a valued asset in the method.

Advantages. The test usually gives an accurate picture of the thyroid hormone status, avoids most iodine contaminants, provides ready detection of iodine contamination, measures thyroxine and triiodothyronine and avoids the measurement of most of the metabolically inactive iodine containing compounds produced by the thyroid gland.

Disadvantages. The radiopaque contrast media of roentgenology still are a problem, and the test is more difficult to perform than the PBI or T-3 test. It is not as readily automated as the PBI test.

Free thyroxine test. This test is not readily available, and is expensive, but since it measures the unbound free hormone in the circulation which is responsible for the true hormonal status of the individual, it may in the future become more popular and available. The test is difficult to perform, time consuming, and is a measurement of infinitesimal amounts of hormone.

Photomotogram test. Since this test is a simple test and an office procedure with a fair degree of accuracy we deem it advisable to mention it. It measures the relaxation time of the achilles tendon reflex by means of the electrocardiograph machine. This reflex is closely related to the thyroid hormone status, and of course is not affected by iodine contamination, or the level of thyroid binding globulin, but directly reflects the level of free unbound thyroid hormones in the circulation. If the test is carefully performed it is of considerable value, though there have been contradictory reports in regard to the value of the test.

Discussion

Most of the commonly used thyroid function tests have been briefly reviewed. We wish to point out some of the confusing and apparently contradictory results of the tests, and to make a few comments on the use of the tests.

(1) A high PBI and a low radioactive iodine uptake test indicate iodine contamination unless proved otherwise.

(2) A PBI or T-4 test which indicates hyperthyroidism, and a T-3 test which indicates hypothyroidism is usually due to estrogen hormones which elevate the thyroid binding globulins. Birth control pills are the most common offenders. High thyroid binding globulin can be congenital.

(3) Discrepancies in the results of the PBI, T-3, T-4 and I^{131} uptake tests may be due to dyshormonogenesis which may be congenital or the result of Hashimoto's struma, acute or subacute thyroiditis.

(4) The ratio of T-3 to T-4 must be normal in the drugs used for thyroid therapy to obtain accurate follow-up with the PBI, T-3 and T-4 tests as triiodothyronine is a much more metabolically active agent than thyroxine. For example, thyroxine therapy alone will give a high PBI in a euthyroid state, whereas triiodinine therapy alone will give a low PBI in a euthyroid state. Dessicated thyroid usually has a normal T-3 to T-4 ratio.

(5) Antithyroid drug therapy can be followed by the PBI, T-3 and T-4 tests, but the patient should be stabilized in a clinically euthyroid state before utilizing the tests.

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THE CITIZEN DOCTOR*

LOUIS ROSENFELD, M.D., Nashville, Tenn.

The life of a physician is composed of many facets. Professional work and related activities, family, friends, hobbies, sports, recreation and sundry avocations comprise the bulk of his endeavors. Religious, educational, civic, and community involvements are also a part of his life.

The emphasis placed on medical work varies greatly from the 8 hour day and roughly 40 hour week of a few, to the 60 to 80 hour week of many. Time invested depends greatly upon the type of medical work in which one is engaged. Dr. Barney Brooks, the mentor and great teacher of some surgeons here tonight, believed strongly that, especially in one's formative years, one's mistress should be work. He felt that a medical student, when not studying, attending class or observing in the operating suite, should be on the wards garnishing what pearls he could from his learned superiors. Love and romance in those days just could not interfere, and woe-be-unto the surgical house-officer who married while on Dr. Brooks' service, for he then must forfeit his position. One well-known member of this organization was fool-hardy enough to test this rule and he lost his job. Internes and residents were "a dime a dozen" in those days, but not so now. The philosophy of work, work and more work is carried by many of us into our more mature years. The brief case is carried home nightly for some to complete the day's paper work, and for others to write a learned treatise. Perhaps a few carry, in this status symbol, only a sandwich and the evening newspaper. Such demands on our time were not present years ago when the population was smaller and our professional chores less demanding. I know of a busy and successful surgeon of years gone by, in our community, who had a leisurely breakfast with his family, and then dropped his children at school before going to his morning rounds—somewhat different from the 5:30 rising hour of many in this audience.

This brings us to the question which is most precious, or should be, to each of us. What of our families? In this hectic pace of long hours of professional activities how best can we do justice to our wives, and properly educate, train and show our love for our children. Each of us must answer this for ourselves as best suits our aims and desires.

Realizing the heavy demands made on the physician's time, and granting that a modicum of hours must be allocated to family and to recreation, one wonders what hours remain for other important extra-curricular activities. Historically the physician has been a leader not only in affairs pertaining to the health of his community but in other widely varied activities, as well. I shall mention some fields of non-medical endeavors, and call to your attention the names of a few physicians who have excelled in these areas, to illustrate that physicians do have other than medical interests.

Literature. Two to three hundred medical contributors to world's literature deserving to be read, to name a few:

(1) Sir Thomas Browne—*Religio Medici* was the most famous of his many works in which he recommends accepting the teachings of the church while at the same time preserving an inquiring, experimental and skeptical mind in non-religious matters.

(2) Sir Arthur Conan Doyle—*Sherlock Holmes,* named after Oliver Wendell Holmes.

(3) Oliver Wendell Holmes—First literary fame achieved by the poem *Old Ironsides,* and fame enhanced by *Autocrat of the Breakfast Table.*

(4) Others as Sir Oliver Goldsmith, Rabelais Wier Mitchell, Somerset Maugham, A. J. Cronin, John Keats, Samuel Coleridge, John Locke, Tobias Smollett, Noah Webster, Cervantes, Frances Scott Key, Ibsen and Goethe. Others who were both physicians and authors, were Thomas McCrae—of *In Flanders Fields* fame, a poem which was actually born under fire in a dressing station during 2nd battle of Ypres, Alex Munthes—*The Story of San Michele* and Cushing's *Life of Osler.*

*Presidential Address, read at the meeting of the Nashville Academy of Medicine and Davidson County Medical Society, January 1969, Nashville.

Inventors.

(1) Dr. Maklon Loomis in electronics, preceded Marconi, Tesla and others.

(2) Dr. John Locke—electric clocks.

(3) Dr. William Channing—electric fire alarm system.

It is of interest that a profession dedicated to preserving life should list among its members four who invented machines to take life.

(4) Dr. Richard Gattling—Gattling Gun

(5) Dr. Joseph Ignace Guillotine—Guillotine

(6) Dr. Revenel—1st torpedo

(7) Dr. Edward Maynard—Breech loading rifle.

(8) Galileo in mathematics and physics.

Other physician-inventors too numerous to mention.

In the field of *music* several physicians were outstanding—such as

(1) Dr. George Etheridge who in the 16th century was the foremost vocal and instrumental musician of his day.

(2) Dr. Louis Berlioz—a French composer. (*Damnation of Faust, Symphony Fantastique, Harold of Italy, Roman Carnival Overture*).

(3) Alexander Borodin—famous Russian composer, born in 1834, whose most famous work is the opera *Prince Igor.*

(4) Fritz Kreisler of violin fame.

(5) Paracelsus wrote music for the organ.

(6) Auenbrugger of chest percussion fame who wrote the opera *The Chimney Sweep.*

(7) Laennec who invented the stethoscope, was a writer of hymns.

(8) Dr. James Naylor who wrote *Casey Jones* and *There'll Be a Hot Time in the Old Town Tonight.*

(9) The British surgeon Shuckburgh wrote *Yankee Doodle.*

(10) Dr. Brewster Higley who wrote *Home on the Range.*

(11) Albert Schweitzer—organist and writer.

In the field of *Exploration* we may forget that such famous men as Robert Peary, discoverer of the North Pole, and David Livingstone, who first explored Africa, were physicians. A bit closer to home was Dr. Thomas Walker who explored Kentucky 19 years prior to Daniel Boone.

Art and Architecture—many famous names in medicine are also famous in these fields and include Drs. Bright, Hodgkin, Charcot, Cajal, Henle and His.

Politics—physicians were extremely active in politics in the early days of this nation but function in a diminishing ratio in this activity as the years pass. There were 5 doctors who signed the Declaration of Independence and 28 doctors in the Continental Congress. Three hundred sixty-nine physicians have served in the U.S. Congress, and 60 have been Governors. The 89th Congress had 4 physicians, 3 of them in the House, and Dr. Gruening of Alaska in the Senate. Dr. Walter Judd was in Congress for 20 years. Other famous M.D.'s in Politics: Sun Yat Sen, Georges Clemenceau and Virchow.

In the field of *Education,* it is of interest that a Tennessean, Dr. Samuel Lyle, authored the *first* compulsory school law to be placed on the Statute books of any southern state, this being passed by the 1897 Tennessee General Assembly.

A more recent example of a great contribution in the field of Education is that of Drs. Eustace and Mary Sloop, the parents of Dr. Emma Sloop Fink, a classmate of mine at Vanderbilt Medical School. They brought not only medicine but schools to the mountain settlement of Crossnore in Western North Carolina in the early 1900's.

Contributions of Physicians to *Social Progress*:

James Parkinson (1755-1824). In 1792 when the French monarchy fell, repressive measures were begun in England to suppress all who were seeking much needed Parliamentary reforms. Parkinson, long before his medical classic, *An Essay on the Shaky Palsy,* which was published in 1817, wrote many pamphlets under the pen name of "Old Hubert," refuting the famous Edmund Burke, an arch conservative. This was the time when Thomas Paine's *Rights of Man* was published. It took great courage in this era to say, much less print, that government reforms were needed. A few quotes from "Old Hubert" are of interest, suggesting things we now take for granted:

(1) "Taxes might be proportioned to the abilities of those on whom they are levied."

(2) "The present system of excising almost all the necessities of life might be abolished."

(3) "Workmen might no longer be punished for uniting to obtain an increase in pay."

(4) "Constant employ might be secured to

the industrious and due provision be made for the aged and disabled."

Rudolph Virchow. We think of Virchow primarily as the great pathologist but he was a great humanitarian and statesman as well. He stated, "The physicians are the natural attorneys of the poor, and social problems fall to a large extent within their jurisdiction." He was elected to the German National Assembly when too young to be allowed to be seated. Later he became a member of the Reichstag and was a great annoyance to Bismarck. In reference to the reigning family of Prussia he stated "I know a family, a very exalted one, in which the grandfather had softening of the brain, the son hardening of the brain, and the grandson no brain at all." Bismarck challenged him to a duel but Virchow was much too busy for such foolishness. These are famous physicians whose contributions have withstood the test of time. These men lived in less hectic days than do we; when medicine was less strenuous, less scientific and less demanding. Few in our profession today can aspire to success in fields far divorced from our primary interest in the science and practice of medicine. However, it is important that we do not withdraw into a shell and abstain from participation in other activities. You might ask "Where is the time for such," and the answer is that *worn* cliche "If you want a job *well* done, get a busy man to do it." In times of deep social unrest such as we are now experiencing, it is essential for us to court and to lead public opinion. Public approbation cannot be engineered, it can only be *earned* by good performance. Let us rightfully assume that we are capable in our professional skills, conscientious in our concern for the welfare of each patient and his family, fair in our financial dealings with all, and dedicated to advancing medical science through research, and teaching. This is still not enough. Each physician should try to be a good public relations person, both in his practice and in his community. Lincoln over 100 years ago said "Public sentiment is everything. With public sentiment nothing can fail; without it nothing can succeed. He who molds opinion is greater than he who enacts laws." We of the medical profession must help shape public opinion in all matters pertaining to medical affairs if we are to help preserve the high caliber of medicine the public demands and we desire.

How then can we enhance our effectiveness, other than being certain that our professional skills, activities and relationships are as near perfect as possible. We must participate in the nonmedical activities of our community. Many of us are doing so.

To ascertain how many of us, and in what civic endeavors we are involved I have sent you a questionnaire. I was fascinated and gratified as I reviewed the 326 replies to note the variety and breadth of community interests of this group. Religious interests and paramedical interests were most popular, but many types of nonmedical endeavors were repeatedly listed. Let us see statistically what we have learned from this study.

Table 1

ACTIVE MEMBERS	535
REPLIES TO QUESTIONNAIRE	325 —60%

In your response to my questionnaire, it appears that many of us live up to the reputation of the medical profession in regard to having illegible handwriting! Signatures were optional. Some left their replies unsigned out of modesty. In this group were some with the most activities. Others left theirs unsigned for other reasons.

Religious Organizations. There was almost unanimous participation, not only as congregants, but as officers of importance.

Table 2

RELIGIOUS ACTIVITIES		
Member of a congregation	305	(94%)
Officer or Trustee	160	(50%)
Attend Services Regularly	235	(72%)
Committee Work	164	(50%)
Sunday School	123	(38%)

Civic Organizations. Many of us participate and work diligently in civic organizations. Perhaps others in this membership would enjoy these or related activities.

Table 3

CIVIC ORGANIZATIONS	
Chamber of Commerce	76
Kiwanis, Exchange, Rotary, Civitan, Sertoma, Lions, etc.	76
Officers	12
Committee Members	20

Health Organizations. We have listed only those members who are especially important to the functioning of these organizations. A large segment of the Academy holds membership and aids in fund-raising for these vital agencies.

Table 4

HEALTH ORGANIZATIONS, VOLUNTARY PARTICIPATION

Regional Medical Program Advisory Groups	37
Cancer Society Board	27
Heart Association Board	15
Bill Wilkerson Center Board	11
Red Cross Board	5
25 Other Organizations	46

Cultural Involvement. Our involvement in this important facet of our community life is limited. Membership in the "Tennessee Botanical Gardens and Fine Arts Center," and "The Nashville Symphony Association" might well be 100% in a group of this caliber.

Table 5

CULTURAL INVOLVEMENT

Cheekwood (2 officers, 5 committeemen)	98
Symphony Association (1 officer, 1 committeeman)	82
Tenn. Fine Arts Commission	1
Children's Theatre Board	1
Theatre Nashville Board	1
Eleven Other Cultural Organizations	11

Welfare Organizations. I was pleased with the participation of our membership in *Welfare* activities. This, of course, is in addition to contributions of our time, skill, and means. Yet, no one, physician or layman, can do enough to alleviate the great needs of the poor, even in this thriving and prosperous nation.

Table 6

WELFARE ORGANIZATION

Boy Scouts	31
U.G.F. Board or Committee	13
Y.M.C.A. Board	9
Catholic Charities and Youth Boards	5
Jewish Center Board or Committeemen	7
51 Other Organizations	76

Non-Medical Educational Activities—I put the ? after the 47 committee or Board members as I think perhaps some replies indicated medical rather than nonmedical teaching responsibilities. The P.T.A. (Harpeth Valley included), I believe to be reasonably accurate.

Table 7

NONMEDICAL EDUCATIONAL ACTIVITIES

Board or Committeemen	47
PTA Officer or Board	22

Political Activities—An increased interest and participation in the political arena was evident this past year, an election year. We should extend and broaden our activities in this area.

Table 8

POLITICAL ACTIVITIES

Office Holder	4
Committeemen	31
Active Participants	61

Nonmedical Writings. I was delighted to learn of the surprisingly large number of authors in our midst. This is very appropriate in view of our previously mentioned literary heritage.

Table 9

NONMEDICAL WRITING (Writing Checks Doesn't Count)	18

These statistics reveal only a portion of the nonmedical activities of our members. Most of us are members of the various health organizations such as the Cancer Society and the Heart Association but we have tabulated only the board members. We all participate to a greater or lesser degree in welfare organizations and drives yet here also we have tabulated only those active in the management of these organizations. In addition there is no reflection here of the charitable contributions we make in our professional services. The entire civic complex needs our help in so many fields. We, among so many others, are the beneficiaries of those organizations which we have the privilege to serve.

Professional seclusion, with the physician cloistered and on a pedestal, is part of the past. The price of success today is involvement in the community about us. Physicians and their wives are educated and informed people in an age in which education and information are the cutting edges of change. We must become activators and leaders to help forge a system in which medicine can perform the wonders of which it is capable and which will meet the needs of both the public and the physician. We know that the progress which has been made in medicine in the past century in this country could not have taken place in any

system other than that of private enterprise. If we would maintain this pace of progress and preserve this free enterprise system of medicine we and our wives must participate actively, intelligently and forcibly in the community in which we live.

* * *

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CASE REPORT

Transthoracic Needle Biopsy of the Lung: and its Complications

Joe L. Wilhite, M.D., B. T. Harris, M.D. and Brooks B. Monaghan, M.D.,* Memphis, Tenn.

Material removed may be studied for pyogens, acid fast organism, fungi, cytology and histology.

Immediately following the procedure, chest films are taken routinely for pneumothorax. Another routine film is taken the next morning. Although pneumothorax may not be visible at once, it may appear after several hours. Also, pulmonary hemorrhage may occur.

Case History

(No. 091820) A 75 year old white man was recently hospitalized because of pulmonary complaint and subsequently, after hospitalization, developed hemoptysis. On chest x-ray, he was found to have an infiltrate of left lower lobe and a localized lesion in the posterior basilar segment. Significant past history and a review of symptoms gave a history, as well as symptoms, of esophageal regurgitation. He had a weight loss of "quite a few pounds."

At a bronchoscopy the findings were those of aspiration, pneumonitis and laryngitis. There was some inflammation throughout the respiratory tree. The left lower orifice was partially obliterated, although not completely closed, and revealed some evidence of inflammatory changes. The left lower segmental orifices could not be identified with exception of the superior segment. A biopsy was taken in this area but was not revealing. Bronchograms revealed fair filling of the right lower lobe with some irregularity of the bronchi. On the left, there was filling of the left upper lobe but there was no filling of the left lower segmental orifices. A discrete mass present in the left base posteriorly. This most likely represented a tumor with obstruction of left lower bronchus. Sputum cytology, as well as bronchial aspirations, were negative for malignant cells.

The patient had a transthoracic needle biopsy of the left lower lobe in which the diagnosis of squamous cell carcinoma was made. In addition, a tangential segment of the pulmonary artery was biopsied.

At the time of biopsy, the patient experienced massive hemoptysis of approximately 500cc during the next 30 to 40 minutes. He was then transferred to the recovery room in which a endotracheal tube was inserted and pulmonary resuscitation was carried out with the operating room stand by for a thoracotomy, if necessary.

Patient responded to supportive therapy and was observed in the recovery room and intensive care unit for the next 48 hours with only a small per cent pneumothorax. The remaining course was uneventful, he was treated with irradiation therapy for squamous cell carcinoma.

Needle biopsy of pulmonary lesions have become generally accepted in the diagnosis of lung diseases. The advantages of this procedure were first described by Ménétier in 1886 and have been discussed by many writers since.[1] Needle biopsy of the lung is a simple, reasonably safe, and inexpensive method of diagnosis of localized[2,3] as well as diffuse[4] pulmonary lesions. Lauby and associates[5] have used percutaneous needle biopsy of mediastinal lesions and found it feasible.

Needle biopsy is particularly advantageous in the diagnosis of solitary, pulmonary lesions, whether adjacent to the chest wall or in the pulmonary parenchyma. This is a very rewarding diagnostic procedure in the diagnosis of metastatic pulmonary lesions, inoperable primary carcinoma and bronchogenic carcinoma in poor risk patients. The information received by needle biopsy is useful in radiation planning.

Despite the rather simple and safe technique, needle biopsy of the pulmonary lesions has not become generally accepted in the diagnosis of lung diseases. Complications such as this one is probably the reason for this.

Method

Only patients who had been examined earlier with other methods such as sputum cytology and bronchoscopy without conclusive results are subjected to transthoracic needle biopsy.

The patient is given preoperative medication for sedation and to aid in the depression of the cough reflex. With the patient lying on the x-ray table, with the aid of an image intensifier and television, the lesion is identified and marked. The skin is prepped with a germicidal solution and local anesthesia is carried down to pleural surface. A small nick is made in the skin to diminish skin friction of the needle shaft. The patient is asked to refrain

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from breathing, utilizing a Vim-Silverman needle, the lesion is perforated. While the patient is refraining from respiratory excursion, a biopsy is taken. This is usually carried out under direct fluoroscopy control permitting one to see the depth of the needle and if the lesion is perforated. The success of the biopsy is dependent upon insertion of the needle to the proper depth.

Contraindications

There are very few absolute contraindications to needle biopsy of the lung. It is inadvisable in uncooperative patients and those who have an uncontrollable or persistent cough. In addition, patients who are unable to refrain from respiratory excursions for approximately 30 seconds is not an absolute contraindications, although it would seem unadvisable. In severe pulmonary hypertension or bleeding tendencies, there is a tremendous risk of bleeding. Bullous cysts or emphysematous patients, it is inadvisable to needle biopsy these areas because of a persistent leak and of tension pneumothorax.

Complications

Reported complications are numerous and are shown in table one. Lauby[5] reported minor complications in 9.2% and major complications in 2.4% utilizing needle biopsies in 626 procedures. The total complication rate of 11.6% of all biopsies.

Table I

Complications Associated With Transthoracic Needle Biopsy of the Lung.

1. Pneumothorax, Asymptomatic
2. Pneumothorax, Symptomatic
3. Hemoptysis, Mild or Severe
4. Convulsions
5. Fever
6. Pleurisy
7. Tumor Implantation

The most frequent complication is pneumothorax which usually occurs in 5 to 10% of the cases. Only about 10% of these require needle aspiration or a tube thoracostomy. These patients should be watched for a tension pneumothorax which may develop and cause a demise of the patient. Report of hymoptysis occurs in approximately 3% of all biopsies. These are usually of a mild nature and severe as the one described in this case report.

Convulsions have been reported and are thought to be due to air emboli. It is not frequent that fever or pleurisy may develop in the post needle biopsy state. It is conceivable that tumor implantation in the needle tract would occur although this is a rare complication and has been reported in the literature.

Discussion

In our experience, a needle biopsy of pulmonary neoplasm has been encouraging. The need for needle biopsy has diminished over the years with the development of diagnostic technique such as cytology, angiography, scalene node biopsy and mediastinoscopy.

In patients who are a poor surgical risk with all the other diagnostic techniques being non-revealing, we feel that it is advantageous to proceed with a transthoracic needle biopsy of solitary lesions. There is a small calculated risk to the patient and the advantages certainly outweigh the risk. Although the literature reveals many different opinions from this, and certainly condemn the procedure because of bronchopleural fistula,[6] pulmonary hemorrhage,[7] tumor implantation along the needle track,[8] empyema[9] and pneumothorax.[10]

Summary

A general discussion of transthoracic needle biopsy of solitary lesions has been presented. Although the methods have some hazards, it is relatively safe, easy and helpful, and we feel should be reserved until all methods of pre-operative study have failed. This procedure has found a definite place in the diagnostic approach to suspected pulmonary neoplasm.

A case presentation of severe hemoptysis is presented which is managed with supportive and symptomatic therapy. The extent of this hemorrhage is substantiated by the tangential biopsy of the pulmonary artery.

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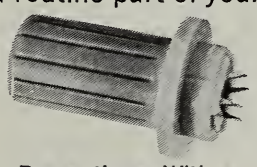
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The author describes in detail several instances of what is being recognized as a new syndrome. The family physician should be alert to this syndrome for early recognition and treatment may be life-saving.

Reye's Syndrome: Clinical and Pathological Features*

BRUCE B. BELLOMY, M.D.,† Knoxville, Tenn.

In 1963 Reye,[1] in Australia, reported what he believed to be a new entity occurring in children, to which he referred as "encephalopathy and fatty degeneration of the viscera." Over an 11 year period Reye and his group saw a total of 21 children, 17 of whom died, who presented a characteristic pattern of clinical, laboratory and anatomic findings. The disease, which occurred in children ranging from 5 months to 8.5 years, began apparently with a mild upper respiratory infection usually lasting one to three days. This was followed by an abrupt progression into vomiting, fever, disturbed consciousness and respiratory rhythm, frequent occurrence of convulsions and coma. In almost half of the children there was wild delerium with screaming and violent movements, usually followed by rapidly deteriorating consciousness. Irreversible progression into cardiorespiratory failure and circulatory collapse characterized the terminal stages of the disease. Hypoglycemia was a frequent finding, and an elevation of the SGOT, when measured, was universally demonstrated. The spinal fluid was not abnormal except for frequent reduction of glucose level. The autopsy findings included marked edema of the brain, marked fatty change of the liver, and variable degrees of fatty change involving the kidneys and heart.

Since 1963, Reye's syndrome has been widely reported from South Africa,[2] Czechoslovakia,[3] Canada,[4] the British Isles,[5] and the United States,[6-8] totaling approximately 84 cases. These case reports have, almost without exception, described a pattern of disease essentially identical to that noted by Reye. This report describes three additional cases of Reye's syndrome; 2 fatal and one nonfatal. The occurrence of these 3, and 2 additional cases in a nearby community[9] over a period of approximately 6 months has lead me to conclude that the condition is not rare, and should be recognized early if appropriate treatment is to be successful.

Case 1. This 2½ year old white girl (A68-88), who had been previously well, was admitted to the hospital with a 5 day history of an upper respiratory infection. Ten hours before admission she developed severe vomiting, fever, convulsions, irregular respiration, and circulatory collapse terminating fatally 2 hours after admission. She had received an injection of benzanthine penicillin (Bicillin) the day before admission, but no other drugs were given and there was no known history of exposure to toxic agents.

A chest x-ray at the hospital was interpreted as normal. The significant laboratory data were: WBC count 46,000, with 86% PMN and 14% lymphocytes; BUN of 28 mg. and blood sugar of 16 mg.%.

The *autopsy* revealed marked cerebral edema, enlargement and marked yellowish discoloration of the liver and a dilated, somewhat flabby heart. Microscopically, the brain showed widespread, early, nonspecific degenerative changes of neurons. This change was most prominent in the cerebral cortex and included loss of staining of Nissl substance, satellitosis and early neuronophagia (Fig. 1). The liver was the site of

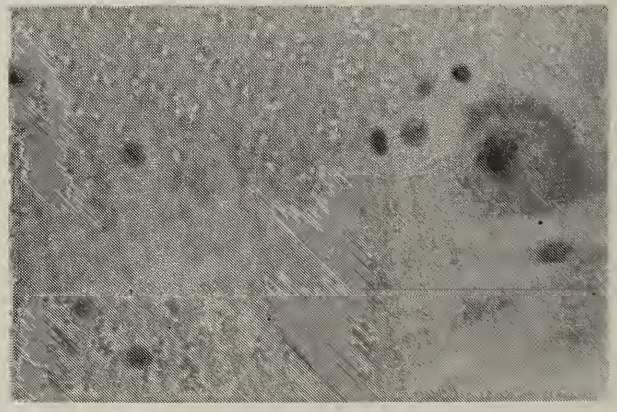


Fig. 1. (Case 1) Neurons of the cerebral cortex show nonspecific satellitosis and chromatolysis.

* Read at the meeting of the Tennessee Society of Pathologists, April 12, 1969, Gatlinburg, Tenn.

†From the Department of Pathology, East Tennessee Children's Hospital, Knoxville, Tennessee.

marked fatty change with essentially 100% of the cells showing extreme miscrovesiculation (Fig 2.) The kidneys showed a moderate degree of

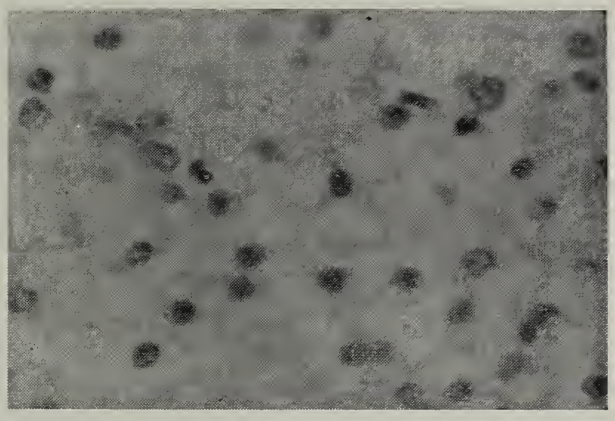


FIG. 2. (Case 1) Liver shows marked diffuse fatty vacuolization.

fatty change, largely confined to the convoluted tubular epithelial cells. There was also a mild deposition of fatty material in many of the myocardial fibers. The lungs showed focal acute bronchitis and bronchiolitis.

Toxicologic studies pre- and postmortem were negative as were attempts at isolation of bacteria and viruses from the brain, liver and heart's blood.

The *diagnosis* of Reye's syndrome was arrived at after an interval of several days following the autopsy, and was suggested by Dr. Thomas E. Lester.

Case 2. This 6 year old white girl (A68-90) had never been seriously ill except for recurrent urinary tract infections two years before and which had been successfully treated. There had been a mild upper respiratory infection for five days. One day later she developed protracted vomiting, requiring hospitalization in another city for intravenous fluid therapy. In spite of this she became semicomatose and dehydrated, and was transferred to the East Tennessee Children's Hospital.

During the first 24 hours she progressed into coma with frequent generalized convulsions, irregular respiration, and a dilated and fixed right pupil. Cardiopulmonary arrest occurred repeatedly requiring a total of 4 cardiac resuscitations. The child died after 3 days, being maintained during the last 2 days only by Aramine drip therapy and use of the Byrd respirator. Ventricular air studies were performed to rule out a possible surgical lesion of the brain. None could be demonstrated; the cerebral cortex extruded from the skull when the dura was opened, as though under greatly increased pressure. There was no known exposure to toxic substances.

Significant laboratory data included: WBC count of 14,800 with 74% PMN, 25% lymphocytes, and 1% monocytes; SGOT 150 units (normal 0-40 units); BUN 30 mg.%; cerebrospinal fluid normal except for protein level of 134 mg.%; blood glucose of 100 mg, and total bilirubin of 0.6%.

The *autopsy* revealed marked cerebral edema, with partial herniation of the cerebellar tonsils through the foramen magnum. The liver was slightly enlarged and diffusely yellow in color. There was extensive ulceration of the distal one-third of the esophagus, with some "coffee-ground" material in the stomach, and the heart was moderately dilated.

Microscopically the brain showed widespread nonspecific, early neuronal degenerative changes essentially identical to those in Case 1. There were very occasional microscopic foci of pericapillary hemorrhage, primarily in subependymal areas. The liver was the site of severe fatty change, again involving essentially all of the cells. Rarely, there were minute foci of eosinophilic degeneration of single liver cells with localized neutrophilic infiltration. The kidneys showed a mild degree of fatty change involving the convoluted tubular epithelial cells.

Multiple samples of tissue and blood were taken at autopsy for toxicologic and microbiologic study. All toxicologic tests were negative, as were attempts to isolate a bacterium or virus.

Case 3. This 10 year old white girl was well until 7 days before hospital admission, at which time she developed a sore throat, some cough and low-grade fever. Two doses of ampieillin (Polycillin) were given orally on the 2nd day of illness. One day before hospitalization repeated episodes of vomiting occurred with some periumbilical pain. Trimethobenzamide Hce (Tigan) was given by suppository on two occasions during this time. Because of vomiting and dehydration she was hospitalized.

Shortly following admission there occurred violent screaming, crying and thrashing movements, with disorientation progressing into semicoma. There were no generalized convulsions, though focal twitching or tetanic movements were observed. These lasted approximately 24 hours, followed by a rapid return of consciousness and clearing of the symptoms. Two days following admission she was able to go home. Treatment consisted of fluids intravenously and phenobarbital intramuscularly on one occasion.

Significant laboratory data included: WBC count of 4,450 with 52% PMN, 40% lymphocytes, 5% monocytes and 3% stab cells; blood glucose 97 mg, and BUN of 16 mg.%; SGOT of 1070 units; and cerebrospinal fluid entirely normal.

The clinical diagnosis of Reye's syndrome was made on the basis of the combination of encephalopathy and a markedly elevated SGOT level, occurring with other signs and symptoms typical of this disorder.

Discussion

A review of Reye's original report and later reports emphasizes the almost stereotyped clinicopathologic pattern of the syn-

drome, with an initially mild upper respiratory tract infection lasting a few days followed by the precipitous development of vomiting, delerium, frequent convulsions, coma and either death or recovery in 24 to 48 hours. The consistently elevated SGOT level, usually in the absence of jaundice, reflects the marked fatty change which has been noted in the liver in every autopsied case. Another characteristic, but not universal feature, has been hypoglycemia, the basis of which is obscure unless related to a combination of decreased carbohydrate intake and disturbed hepatic function. At any rate, the hypoglycemia seems not directly related to the occurrence of convulsions, since attempts to arrest convulsions by intravenous glucose infusions have been unsuccessful.

The autopsy findings noted in the cases described here and in previous cases, have been almost equally stereotyped and include marked edema of the brain, marked fatty change of the liver and, less consistently, and usually in milder degree, variable amounts of fatty change involving the kidneys and heart.

The pathogenesis of the cerebral edema, which to me seems to be the primary factor leading to death in this syndrome, remains obscure. One might postulate a viral infection with simultaneous effects on the liver and brain. In Lucke's[10] large series of fatal cases of infectious hepatitis, during World War II, 15% showed evidence of degeneration of neurons and mild meningoencephalitis. Only occasionally, however, have viruses been isolated in Reye's syndrome such as Echo virus, type 11, in Golden and Duffell's[11] case in 1965. A second explanation for the simultaneous occurrence of combined hepatic and central nervous disease will be one related to a drug reaction or exogenous toxins. Glasgow and Ferris,[12] in 1968, described a fatal case of poisoning, attributed to a commercial paint-thinner, in a four year old child. The 3 day clinical course and the autopsy findings were very similar to those in Reye's syndrome including edema of the brain and fatty change involving liver and kidneys. Again, however, in the large majority of case reports toxicologic studies have been unrewarding. Because of the nonspecificity of the clinico-anatomic features of this disease, and the absence of a clear etiologic factor, the existence of Reye's syndrome as a specific entity has been challenged recently.[13] Until such time, however, when this distinctive disorder can be either separated into multiple sub-disorders or proven to have a single etiology, there continues to be great practical value in recognizing its existence.

Treatment of Reye's syndrome has involved primarily the empirical use of adrenal steroids and hypertonic glucose solutions intravenously, as suggested by Reye,[1] directed toward the reduction of cerebral edema and correction of hypoglycemia. Other therapeutic efforts have been primarily supportive in nature.

Summary

Three cases of Reye's syndrome, 2 of which ended fatally, have been presented. This distinctive disorder, which may ultimately prove to be the result of multiple factors as yet undetermined, is apparently being seen with increasing frequency. Its rapid recognition and prompt treatment may offer the possibility of an increased salvage rate of what has proven to be a devastating illness of childhood.

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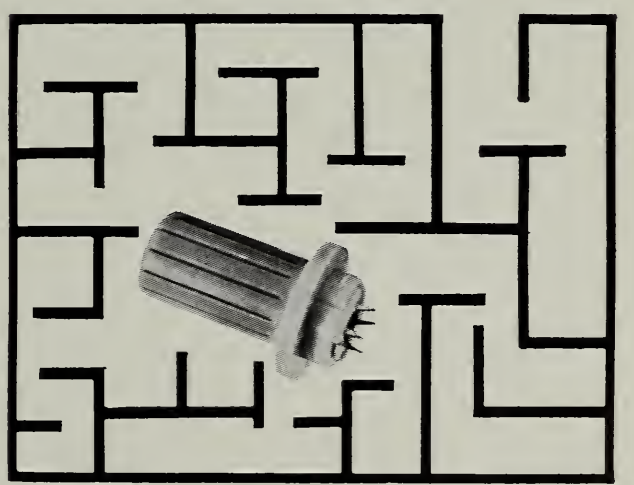
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STAFF CONFERENCE

Vanderbilt University Hospital*

Temporal Lobe Seizures with Psychomotor Status.

DR. DAVID KARZON: The child represents a fairly common pediatric problem and illustrates the dramatic and therapeutic potential of astute diagnosis and therapy.

DR. WILLIAM LAIRD: The Patient is a 6½ year old white boy who was admitted to the pediatric service of Vanderbilt University Hospital for evaluation of prolonged confusion.

He had been the product of a normal pregnancy, labor, and delivery. His early growth and development were normal but social maturity seemed slow in comparison to his peers. In September, 1968, while sitting by the kitchen table he suddenly dropped a jar and stared blankly for 3 to 4 seconds. His mother observed the incident but did not recognize its significance. The parents became concerned and sought neurosurgical consultation when similar episodes occurred monthly for the remainder of the year. An electroencephalogram revealed a paroxysmal abnormality, petit mal was diagnosed and the child started on diphenylhydantoin (Dilantin) and phenobarbital. The seizures were at first controlled but within a few months the spells recurred and seemed even more bizarre. The staring was prolonged and associated motor activity more elaborate. He walked into doors, made purposeless movements of his hands, and on occasion experienced forced turning of the head to the left.

In February, 1969, the dosages of both Dilantin and phenobarbital were increased with little improvement in frequency of seizures or severity. Hyperactivity was induced by the phenobarbital which further disturbed the child's behavior pattern. Two days prior to admission jerking movements of the extremities began and he lapsed into long periods of staring and confusion during which he refused to talk, eat, or urinate. A grand mal convulsion prompted admission to a local hospital where parenteral drug therapy was needed to terminate the attack. Following discharge from the hospital, frequent small seizures continued at home characterized by jerking of the extremities, chewing movements, and nonrecognition of his family.

On admission to Vanderbilt Hospital the patient was awake but unresponsive to either verbal or tactile stimulation. Intermittent bursts of motor activity were associated with pupillary dilitation. The general physical examination was unremarkable with the exception of a markedly overdistended bladder. The deep tendon reflexes varied from absent to hyperactive and bilateral Babinski responses were elicited.

The diagnosis of psychomotor status was suggested shortly after admission and confirmed by electroencephalography. The EEG revealed a diffuse electrical discharge initiated by a focus in the left temporal lobe (Fig. 1). An intravenous injection of 5 mg. of diazepam (Valium) arrested the seizure both clinically and electrically within one minute (Fig. 2).

The patient slept for 5 hours and seemed normal upon arising. Dilantin 50 mg., t.i.d and primidone (Mysoline) 50 mg. t.i.d. were started on the night of admission. The following day, the psychomotor status recurred and again responded to diazepam. The primidone dosage was increased to 125 mg. t.i.d. No further seizures were noted but a repeat EEG continued to demonstrate a slow wave focus in the left temporal lobe. Brain scan, skull x-ray, chest x-ray, and routine blood screening tests were all normal with the exception of a slightly elevated BUN.

DR. KARZON: The child was discharged from the hospital and as he lives a considerable distance away, was unable to return for this presentation. We do have some x-ray films which Dr. Whitlock will discuss.

DR. GORDON WHITLOCK: Skull x-rays remain an integral part of the evaluation of seizures although the yield of abnormalities is lower than some other diagnostic procedures. The presence of paraventricular calcifications suggest tuberous sclerosis while scattered calcifications is indicative of Sturge Weber's disease. Increased intracranial pressure is revealed by separation of the sutures and demineralization of the dorsum sella. This child's skull is normal with the exception of a mild beaten silver appearance. This appearance is caused by irregular skull calcification and is frequently observed with hydrocephalus. However, this skull appearance is sufficiently frequent in normal children as to be considered of no significance in the absence of other signs of increased pressure. The skull x-ray was therefore interpreted as normal.

DR. GERALD FENICHEL: Let us first define some of the terms used to classify convulsions. The diagnosis of "petit mal" was originally applied to this child's seizure disorder. The term petit mal is frequently used broadly to denote all seizures that are not grand mal. Properly, the term should

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be restricted to three clinical seizure patterns which are all associated with a 3 per sec. spike and dome abnormality on the EEG provoked by hyperventilation. The three clinical presentations are: a) the absence attack, a brief stare or blink of the eyes; b) the myoclonic seizure, a symmetrical flexion jerk of the arms associated with a nodding of the head; and c) the akinetic seizure, a sudden dropping to the floor with immediate recovery. The seizures tend to occur many times per day and may be unrecognized as convulsions for many months. The attacks always have their onset during childhood. I will assume that the neurosurgeon who first diagnosed the child's condition used the term "petit mal" broadly to indicate "not grand mal" rather than in the restricted manner described above. This assumption is based on the surgeon's choice of diphenylhydantoin for therapy. This was an appropriate drug for this boy's disorder but would have been contraindicated in the presence of true petit mal. Temporal lobe or psychomotor seizures would be the preferred classification for this patient's convulsive disorder. Petit mal and psychomotor are frequently confused as they are both characterized by episodes of absence. At times, they are clinically indistinguishable although as a general rule temporal lobe seizures tend to be longer in duration but lower in frequency. Further, temporal lobe absence is more apt to be associated with motor activity than is petit mal.

The temporal lobe is a complex portion of the brain which includes memory storage among its many functions. In a sense, a psychomotor seizure is a focal memory seizure during which time the patient functions as if for every moment in time no memory trace is made. Though conscious he is unaware of his surroundings, and behavior seems automatic and nongoal directed. The episode may be quite brief as when this patient dropped the jar and stared for a few seconds. In contrast, another patient under my care left a soccer field, ran to a locker room, showered,

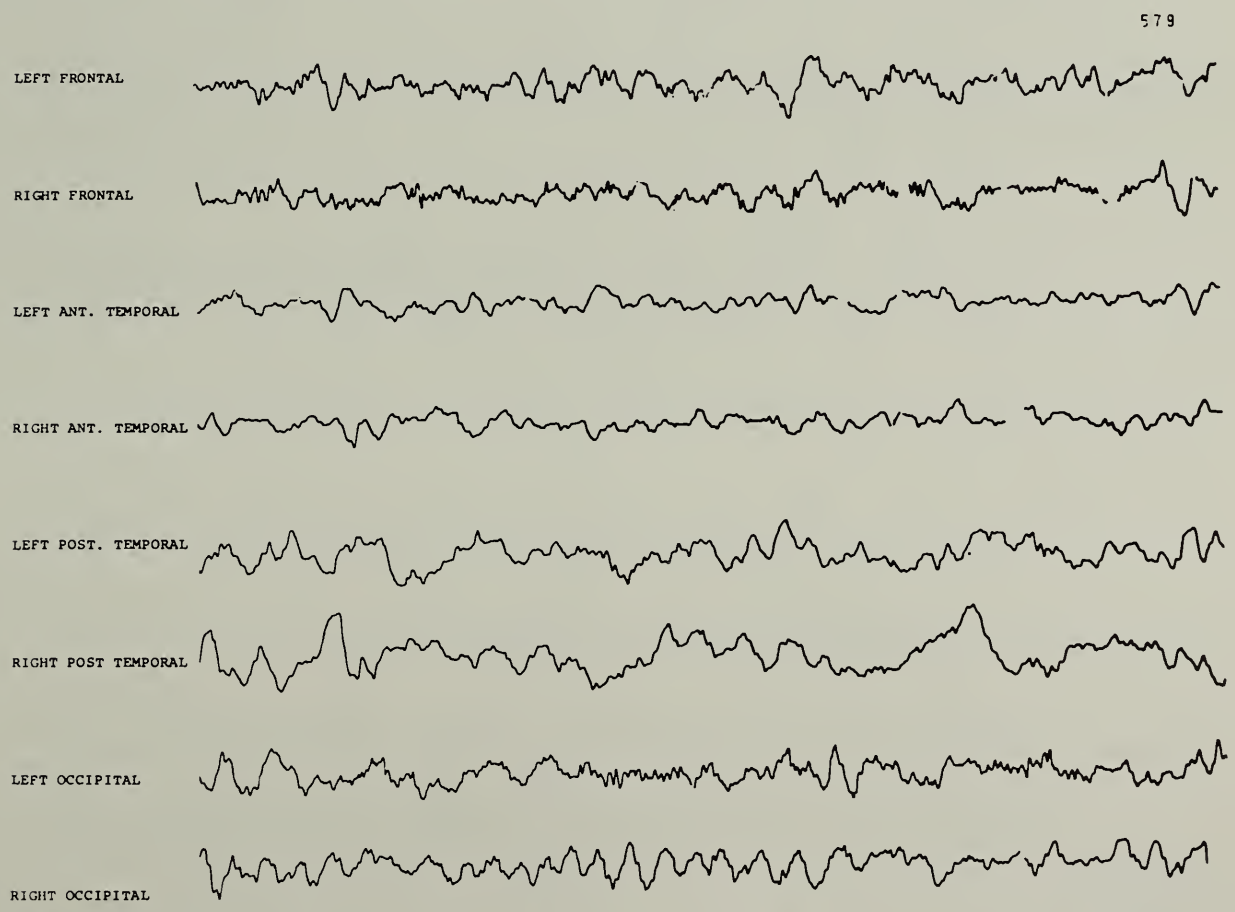


Fig. 1. EEG upon admission. A continuous spike discharge is noted from both temporal lobes with a predominance from the left temporal leads. There is a diffuse slowing throughout.

dressed, and was outside on the street before the seizure was over. He had no memory for any of the events from the time he suddenly departed the game under the influence of the seizure. Other temporal lobe phenomena which may be associated either as an aura or part of the seizure include olfactory and auditory hallucinations, abnominal pain and nausea, speech arrest, and turning of the head and eyes.

In considering the etiology of this child's seizure disorder, the first distinction to be made is between a chronic brain syndrome and a progressive disease of the nervous system. Historically, the child was observed to have some problems in maturation dating to at least age 3 and has been experiencing convulsions for at least 9 months. Despite this long seizure history, neurologic examination is unrevealing. Therefore, it is reasonable to assume that these convulsions are symptomatic of a chronic brain syndrome present from birth rather than a newly acquired, deteriorating condition of the nervous system. The presentation in status epilepticus is unusual and the possibility of a tumor or other active process in the temporal lobe must be excluded. A brain scan was performed and found to be normal. The scan when coupled with a skull x-ray represents sufficient screening and special radiographic procedures such as ateriography and air studies are not indicated. His seizures are now well controlled on primidone and diphenylhydantoin and it is our plan to follow him as an outpatient at regular intervals.

DR. KARZON: Would you discuss the use of diazepam (Valium) in status epilepticus and explain why it has not been used prophylactically as an anticonvulsant?

DR. FENICHEL: Diazepam parenterally is now the treatment of choice in status epilepticus. It may be injected either intravenously or intramuscularly but the former route is preferred. A dramatic cessation of seizure activity can be expected in 85% of patients. The parenteral suspension is not extremely stable and it is not advisable to

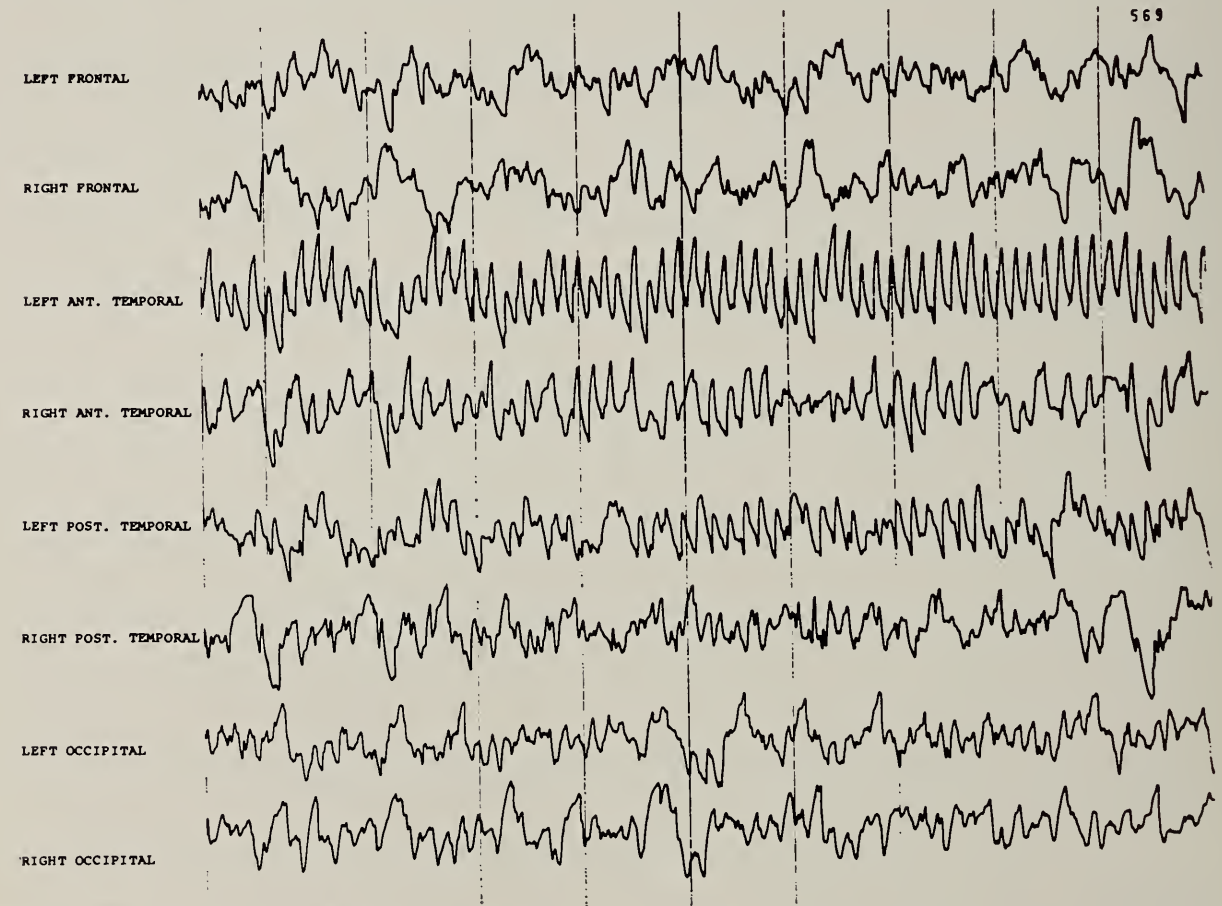


Fig. 2. EEG one minute following intravenous injection of 10 mg. of diazepam. The spike discharges have disappeared and the record resembles natural sleep. Spindles are seen.

inject the drug through tubing containing other solutions. A change of pH may cause the drug to precipitate out of suspension. Respiratory embarrassment does not occur at therapeutic dose levels, nor need there be undue sedation. The range of safety is wide and in most school age children a single 5 mg. dose is usually adequate. Older children and adults require 10 mg. while 1 to 3 mg. are sufficient for infants.

Diazepam has not had great success as an oral prophylactic agent. Limited benefits may be derived in the treatment of myoclonic and akinetic seizures. However, even in this group, it is not the drug of choice but rather an adjunct to therapy.

DR. WILLIAM WADLINGTON: Is diazepam useful in infantile spasms?

DR. FENICHEL: Infantile spasms are associated with a wide variety of clinical entities which usually have in common a bad prognosis. Valium has been used and may be helpful. My own experience has been disappointing in that the therapeutic affect seems short-lived and steroids or ACTH are eventually needed.

DR. WADLINGTON: Do you feel that hyperkinetic children who become more active on phenobaribital are good candidates for amphetamine therapy?

DR. FENICHEL: Children who are hyperactive on the basis of a short attention span tend to be more distractable and hyperactive when given a sedative and more attentive and manageable when amphetamine is used. Thus, it is true that the two drugs are likely to have opposite affects in the same child.

DR. JOSEPH LITTLE: How often is temporal lobe epilepsy accompanied by organic disease requiring further therapy?

DR. FENICHEL: The temporal lobe is the single most common location for epileptogenic foci in the pediatric age range excluding infancy. The brain injury is thought to occur at birth and has been related to the position of the head during labor. This relationship is not definitely established. Tumors as a cause of epilepsy in children are rare. In the presence of a normal neurologic examination and normal skull x-ray, I rarely do any further diagnostic procedures. In this patient, a brain scan was ordered only because of the unusual presentation of status epilepticus.

DR. KARZON: Unfortunately, our time has drawn to a close. I wish to thank all the participants for this lively discussion.

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From the Executive Director
E. Ballentine

TMA MEDICAL DIGEST

News of Interest to Doctors in Tennessee

TMA'S 1970 ANNUAL MEETING . . . Will include outstanding scientific programs and featured speakers. Governor Buford Ellington and Dr. Roger Egeberg, Assistant Secretary for Health and Scientific Affairs, HEW, have been invited to address the general scientific meeting . . . The 1970 annual meeting will be conducted in Memphis with headquarters at the Sheraton-Peabody Hotel, April 9-10-11 . . . Fifteen of the medical specialty societies will also conduct their annual meetings concurrently with TMA . . . Sessions of the House of Delegates will be held on the evening of April 8th and the morning of April 11th. It is not too early to make your plans to attend TMA's oustanding annual meeting in 1970.

* * * * *

TMA COMMITTEES AND BOARD ACTIVE . . . Several important committees of TMA have been active with meetings being conducted during the summer and early fall months. Among these were the Committee on Utilization Review; Committee on Scientific Work; Interprofessional Liaison Committee; Communications and Public Service Committee; Committee on Group Insurance; Committee on Legislation; and the Committee on Continuing Medical Education. The Committee on Scientific Work completed its planning for the 1970 annual meeting and also held a joint meeting with representatives of all of the medical specialty societies in Tennessee to work on the program for the 1970 meeting . . . The Board of Trustees met on July 27 for its regular quarterly meeting and again on October 12, both involving lengthy sessions on important issues . . . The Executive Committee of the Board met in special session on August 10, working on specific problems involved with the implementation of Medicaid.

* * * * *

NEW LAW AND POLICY CONCERNING TENNESSEE LICENSURE OF FOREIGN PHYSICIANS . . . The Tennessee General Assembly passed Public Law 338 in its session early this year, which removes citizenship as a requirement for medical licensure of foreign physicians . . . The Law states that citizenship shall not be a requirement if the applicant has lived legally in the United States for at least two years prior to application for a license, and if he has successfully passed the Tennessee Basic Science Examination . . . No reciprocity will be extended to graduates of foreign medical schools. The dates and locations of the test are set by the State Board of Basic Science Examiners meeting in Nashville each February. The tests, which are given twice each year, are held in Nashville and Memphis . . . Any foreign physician interested in taking this test, should write Dr. Roland H. Alden, Secretary of the Tennessee Board of Basic Science Examiners, at 62 South Dunlap Street, Memphis, Tennessee, 38103. A physician should have evidence of being a graduate of a foreign medical school and he must provide a notarized statement that he has been in the United States two years prior to the date of the test.

* * * * *

PERTINENT STATEMENT BY SOCIAL SECURITY COMMISSIONER BALL . . . Social Security Commissioner Ball conceded his investigators had looked into

700 fraud cases concerning medicare and medicaid, that 300 were still in some stage of inquiry, that 14 had been turned over to the Justice Department for prosecution. "But these should not be taken as a reflection on the 200,000 doctors in the country" Ball said. He cautioned high medicare-medicaid income alone did not imply wrongdoing. Some doctors, he said, concentrated their practice on older people.

* * * * *

SHOULD A PHYSICIAN ACCEPT A BANK CARD IN PAYMENT FOR SERVICES? . . . Thorny ethical questions such as, "should a physician accept a bank card in payment for services?" or "what may he tell newsmen or lawyers about a patient?" have received consideration over the years by the AMA's Judicial Council . . . Many of their decisions, supplemented by statements from the AMA's House of Delegates, have now been collected and published in a booklet entitled, Judicial Council Opinions and Reports–1969 . . . In addition to discussing various specific ethical questions, this 84-page practical guide also includes the Association's "Principles of Medical Ethics," (TMA abides by AMA Principles of Medical Ethics) as well as the duties, rules, and procedures of the Council. Copies of the Judicial Council Opinions and Reports may be obtained without charge by writing the AMA's Department of Medical Ethics, 535 North Dearborn Street, Chicago, Illinois, 60610.

* * * * *

SELF-EMPLOYED PHYSICIANS NOW COVERED FOR DISABILITY UNDER SOCIAL SECURITY . . . In October, many self-employed physicians reached a land mark. With their earnings covered since 1965, they have contributed to Social Security long enough to be insured for disability . . . Social Security disability benefits can be paid to an insured person under 65 who has a physical or mental impairment severe enough to keep him from doing any substantial work for a year or longer. Payments begin after a waiting period of six full calendar months . . . Benefits can be as much as $218 a month for a disabled person and up to $434.40 for a family. Self-employed physicians disabled in the immediate future, however, would probably not yet be eligible for these maximums since their earnings have been covered by Social Security for a relatively short time. Benefits are figured from a person's average covered earnings over a period of years . . . The disability protection can be a supplement to the physician's private insurance. It is part of the total social security package toward which many physicians have been contributing.

* * * * *

CURRENT–CURRENTS . . . House Ways and Means Committee began extensive hearings on proposals to amend Social Security Act in mid-October . . . Exhibitors are concerned about attendance at national and state medical conventions. AMA's 1969 meeting in New York drew fewer than 15,000 MDs compared to some 26,000 at previous New York conventions . . . Average business letter costs you about $2.75 today, up from $1.17 in 1953. Maximum rates for three minutes station phone call in Continental U.S. is $1.70, and you can say about 450 words . . . Internal Revenue Service plans to require health insurance industry to report all payments to physicians, other health practitioners, along with social security numbers. IRS already requires report of payment of fees for medicare, medicaid funds . . . Ten federal agencies deal in manpower programs, and 18 in improving our natural environment, 20 in health, and 21 in spending for higher education, according to findings of the Senate Government Operations Committee. There are 1,050 separate programs that provide money to states, cities, institutions or individuals . . . American Academy of General Practice raised its annual dues from $35 to $50.

Public Service

Communications Legislation

Hadley Williams, Public Service Director

RURAL HEALTH CONFERENCE CONDUCTED . . . The Rural Health Committee of TMA co-hosted the 7th Tennessee Rural Health Conference with the Tennessee Farm Bureau Federation and the University of Tennessee Agricultural Extension Service October 8, 1969 in Johnson City. The one-day meeting was held on the campus of East Tennessee State University and attracted more than 200 participants. Dr. Ben N. Saltzman of Mountain Home, Arkansas, immediate past-chairman of the AMA Council on Rural Health, delivered a paper entitled "Models for Delivery of Rural Health Services" and Dr. Paul E. Teschan, newly appointed director of the Mid-South Regional Medical Program discussed "The Impact of RMP on Rural Health." Other topics presented included papers on Comprehensive Health Planning, Health Careers, Poisons on the Farm and the Recognition and Use of the Slow Moving Vehicle emblem. Chairman of the TMA Rural Health Committee is Dr. Julian C. Lentz, Jr. of Maryville.

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CIVIC CLUBS TO UNDERTAKE DRUG ABUSE CAMPAIGNS . . . National campaigns to combat drug abuse have been initiated by Kiwanis and Optimist Clubs. The project marks the first time in history Kiwanis has concentrated on a single service program for the year. Both organizations have held discussions with AMA and local medical societies are being urged to cooperate with any of the 5,600 Kiwanis clubs and 3,000 Optimist clubs setting up community programs. AMA materials are being used in both programs.

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PUBLICITY PLENTIFUL FOR NATIONAL HEALTH INSURANCE PLAN . . . You'll be reading and hearing more and more about plans for compulsory health insurance plans. The AMA reports that the New York Times has been giving considerable space to the idea and the newspaper has considerable influence on other newspapers, magazines and television networks.

* * * * *

AMA ANSWERS ATTACK ON PHYSICIANS . . . Commenting on a recent Times article attacking physicians who participate in federal health programs AMA President Dr. Gerald D. Dorman said physicians are trying to work with Medicare to assure adequate health care for the elderly. "In return for their participation, which is essential to the functioning of both Medicare and Medicaid, their reward is unprecedented public vilification," he said. He added: "Already badly overworked, a growing number of doctors are asking themselves if continued support of federal health care programs are worth it." Subject of many articles is a list of 5,000 physicians who received $25,000 or more under programs in 1968, none of which makes clear that the amount of money received is not an indication of overcharging or other wrongdoing.

MORE ON MEDICAID SPENDING . . . The Bulletin of the American College of Radiology reports that the acting director of the HEW office that supervises Medicaid spending stated programs now in operation spend some 39 cents of their dollar on hospital care. Another 31 cents go for nursing homes while physician services come to 10 to 12 cents. Dental care, drugs and other ancillary services account for the remainder. Despite the relatively small percentage involved with doctor fees, these have the greatest visibility when disputed, the commissioner said. This is because the amounts quoted, greatly in excess of most annual incomes, appear to be going to individual physicians for only a portion of their practice.

* * * * *

OPTOMETRIC CARE SURVEYED . . . A Medicaid survey by the New York City Health Department found that 17.8% of patients received "unsatisfactory care" by optometrists. The care was evaluated by the Optometric Center of New York.

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UTAH REPORTS SOARING LIABILITY INSURANCE RATES . . . Professional Liability insurance rates in Utah is reducing the number of new physicians coming into the state as solo practitioners. Uninsured MDs entering Utah find insurance hard to get unless they affiliate with partnerships, groups, institutions or clinics. Renewal premiums for general surgeons went from $294 in 1968 to $2,910 in 1969; for ophthalmologists, $341 to $1,992; for orthopedic surgeons, $600 to $2,210; for groups, $7,668 to $19,087.

* * * * *

MEDICARE COSTS TO RISE . . . Beginning January 1st Medicare beneficiaries must pay an additional $8 for ordinary hospital stays. The increase is being blamed on inflation and long-term trend toward higher hospital costs. Hospital bill for average stay by Medicare beneficiary now amounts to approximately $700.

* * * * *

RMP SETS PRIORITY FOR FUTURE GRANTS . . . The Mid-South Regional Medical Program will in the future give high priority to projects and grant applications from those geographic areas that do not have current projects in operation. Priority areas include Upper East Tennessee, Upper Cumberland and the South Central area. Dr. Charles Trabue, IV is area coordinator for the South Central and Upper Cumberland areas. Health providers that need assistance in planning projects should contact Dr. Trabue at the Nashville RMP headquarters. The Upper East Tennessee area does not have a coordinator at the present time but an appointment is expected within the next few weeks. Counties in this area include Johnson, Carter, Sullivan, Washington, Unicoi, Greene, Hawkins and Hancock. The Upper Cumberland area is composed of Pickett, Fentress, Cumberland, Clay, Overton, Macon, Jackson, Smith, Putnam, DeKalb, White, Van Buren, Warren, and Cannon counties. The South Central area comprises Perry, Wayne, Hickman, Lewis, Maury, Lawrence, Giles, Marshall, Bedford, Lincoln, Moore, Coffee, and Franklin counties.

President's Page



Francis H. Cole

The fourth quarter meeting of the Board of Trustees was held in Knoxville at the invitation of the Knoxville Academy of Medicine on October 12. The Board meeting was conducted in the recently completed new building of the Academy. This magnificent structure was an excellent place for such a meeting and the hospitality of the members of the Knoxville Academy of Medicine was most gracious. The Board members were afforded an opportunity to meet and talk to several Knoxville physicians at a reception on the evening prior to the Board meeting. The Knoxville Academy of Medicine's new building provided a pleasant setting for a long hard day of considering the business of the Tennessee Medical Association.

A considerable portion of the Trustees meeting had to do with Medicaid and its problems. The officers and committees of TMA have close and continuous contact with the administrators of Medicaid and with the Public Health Council. Pursuant to the directives of the House of Delegates in several resolutions in the recent past, the Trustees have instructed the officers to press for the most acceptable program possible for doctors, and the most satisfactory program for patients that can be obtained. The size of the undertaking, the newness of the concept, and the traditional independence of physicians combine to make for many misunderstandings.

Each physician must decide for himself how he will react to the Medicaid program. Each physician must remember his responsibility to the indigent and the emergency ill.

The Tennessee Medical Association will continue to press for simplification of the paper work, and for realistic reimbursement of all the people involved in providing services for the eligible recipients. The State of Tennessee, upon undertaking responsibility for health care for these people, must somehow provide enough money to pay for the services rendered by hospitals, nursing homes, pharmacies, laboratories, and physicians.

Sincerely,

Francis H. Cole M.D.

President

THE JOURNAL

OF THE
TENNESSEE MEDICAL ASSOCIATION
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NOVEMBER, 1969

EDITORIAL

RUBELLA VACCINATION

The AMA Council on Environmental and Public Health directs attention to the program of vaccination against German Measles, and urges that the medical profession assume its responsibility in this important endeavor in public health.

Though one gain of vaccination is to lessen the possible greater morbidity of this disease in postpubertal patients as compared to younger children, this is of the more secondary consideration. The primary goal of vaccination is to produce immunity especially of the young females in the prevention of the *congenital rubella syndrome* a possible result of rubella in the pregnant young woman, particularly during the first two trimesters. Since the Australian physician, Gregg, made his astute observations that congenital cataracts were a common result of rubella during pregnancy, the succeeding quarter of a century has offered much proof of the spectrum of congenital abnormalities which may follow infection in the mother. It is now accepted that 15 to 35% of infants from pregnancies during which rubella was a complication are born with the congenital rubella syndrome. This includes partial or total loss of hearing or of vision, major cardiac defects, mental retardation or combinations of these. (There are thousands of victims in the countries of the World.) It is the public's recognition of this syndrome which has given a major impetus to liberalizing abortion laws. Some women, no matter how desirious of having children and having had rubella during pregnancy, have been unwilling to accept such high gambling odds of a defective child, and have needed to go to other states or foreign countries to obtain an abortion.

Studies have shown that the highest seasonal incidence of rubella is in the months of March, April and May in the United States. National and international pandemics strike at intervals of 6 to 9 years. It is said that in the past 40 years the exceptionally high epidemic peaks were 1934 and 1935, 1942 and 1943 and 1964.

Though a number of scientists have worked toward an acceptable vaccine, the first vaccine licensed was in June of this year. This was an attenuated live virus grown on a duck embryo cell culture (Merck, Sharp and Dohme). It was tested on 13,000 susceptible children before being licensed, and was found to be inocuous, except for transient arthralgia or arthritis or rash in a few of the older children (much as in the clinical picture of the acquired disease). An attenuated live virus of a different strain and grown on rabbit kidney is slated for licensing soon (Smith, Kline & French). Two additional attenuated live virus vaccines grown on other media (Phillips-Roxane, and at the Wistar Institute) will probably become available shortly and before the next seasonal peak of 1970.

The currently licensed vaccine is given in a single dose, subcutaneously, of reconstituted lyophilized vaccine.

In making his decision to vaccinate, the physician has the following data for consideration. Everyone is aware that rubella may be so mild in childhood that a negative

history of disease is untrustworthy. From widespread serologic testing, the National Communicable Disease Center estimates that immunity from naturally acquired disease is of the following order: 15% for children under 5 years; 35% for those 5 to 9 years; 60% for the 10 to 14 year group; 75% for the 15 to 19 year olds, and 85 to 90% for those over 20 years of age.

Since two-thirds of children under 10 are nonimmune, and since the adverse reactions to vaccine are nil in this age group, the recommendation stands that all children in kindergarten and the early grades in school be vaccinated since this age group is also the great reservoir for infection in a community. Children under one year should not be vaccinated since they may still have the passive immunity from maternal antibodies.

Pregnant women must not be vaccinated, because the resultant viremia may last 2 to 6 weeks and thus might infect the fetus.

If vaccination of a nonpregnant woman in childbearing age is considered, several steps are essential. Since a high percentage are immune (see above), serologic tests for immunity are in order but *only* in a laboratory of recognized *competency.* Secondly, medically acceptable contraception must be used because of the hazard of an infected fetus if the woman became pregnant during the stage or viremia. The patient should be aware of this hazard, and it is recommended that a written *informed* consent for vaccination be obtained.

It is pointed out, as in all vaccines, that one must be aware of the origin of the culture media (duck egg) and neomycin in the Merck, Sharp and Dohme vaccine, the only one licensed so far, and be prepared for sensitivity reactions. Today one must always call attention to the hazards of corticosteroids interfering with normal protective mechanisms.

Your Editor agrees with the recent *release* of recommendations by the AMA Council, from which he has paraphrased freely, (September 1969) that the medical profession should join public health agencies in launching this important preventive activity to develop an immune female population—especially the prospective mothers of ten years from now and avoid the pathos of a handicapped child.

R. H. K.



To the Editor:

BE IT RESOLVED that the Tennessee Society of Pathologists go on record in favor of a more realistic and equitable fee schedule for professional services, travel expenses, courtroom expenses, and toxicological fees in the medical examiners system in the State of Tennessee.

BE IT FURTHER RESOLVED and strongly urged that the Tennessee Public Health Council direct its attention to this problem at its next meeting with consideration of diversion of the Tennessee Public Health funds presently utilized in other less needed areas to the area of medical examiners system if no other solution can be found.

cc: Legislative Committee of Tennessee Medical Association
Members of Tennessee Public Health Council
Commissioner Gene Fowinkle, M.D.
Francis Cole, M.D., Tennessee Medical Association President
Thomas Littlejohn, M.D., State Medical Examiner

Sept. 24, 1969

George F. Bale, M.D.
Secretary-Treasurer
Tennessee Society of Pathologists

IN MEMORIAM

Richardson, Guy C., Bristol. Died September 11, 1969, Age 59. Graduate of University of Tennessee School of Medicine, Memphis, 1934. Member of Sullivan-Johnson County Medical Society.

PROGRAMS AND NEWS OF MEDICAL SOCIETIES



New Members

The Journal takes the opportunity to welcome these new Tennessee Medical Association Members.

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE
S. Lane Bicknell, M.D., Jackson
Roy Appleton, M.D., Jackson

KNOXVILLE ACADEMY OF MEDICINE
Samir B. Shamiyeh, M.D., Knoxville

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY
Madison H. Buckley, M.D., Memphis

Memphis-Shelby County Medical Society

A meeting of the Memphis-Shelby County Medical Society was held on October 7th in the auditorium of the Institute of Pathology at the University of Tennessee. The principal speaker at the meeting was Dr. Ruth Hagstrom from the Vanderbilt University School of Medicine. Dr. Hagstrom's topic was "Biological Aspects of Air Pollution."

Knoxville Academy of Medicine

The speaker for the October meeting for the Knoxville Academy of Medicine was Lieutenant Colonel Kenneth H. Cooper, USAF, MC, from San Antonio, Texas. Dr. Cooper is a senior flight surgeon and is in charge of the Air Force's Physical Fitness Program. In 1967, he received the National Jaycee Award for Leadership in Physical Fitness and has many professional and non-professional publications to his credit. He is well known for his book "Aerobics," published in April, 1968 and a Book-of-the-Month Club selection.

Roane-Anderson County Medical Society

Dr. L. W. Diggs, Professor of Medicine, Emeritus, University of Tennessee at Memphis, was the speaker at the September meeting of the Roane-Anderson County Medical Society. Dr. Diggs' topic at the dinner meeting was "Practical Points in the Diagnosis and Treatment of Hemorrhagic Diseases."

Sullivan-Johnson County Medical Society

The Sullivan-Johnson County Medical Society met on September 11th to hear a lecture by Dr. Jay Young Gillenwater, professor and chairman of the Department of Urology at the University of Virginia. Dr. Gillenwater, a native of Kingsport, received his MD degree from the University of Tennessee Medical School in Memphis and has served on the medical faculty there, as well as the University of Louisville and the University of Virginia.

McMinn County Medical Society

The McMinn County Medical Society recently hosted a joint meeting with the McMinn County and Bradley County Bar Associations at the Spring Brook Country Club in Athens. Dr. Thomas C. Littlejohn, Jr., Assistant Professor of Pathology at Vanderbilt University School of Medicine, was the main speaker for the evening. Dr. Littlejohn discussed the importance of good communications between the two professions and emphasized that each profession must understand the other profession's position in serving the public. The meeting proved to be quite productive and it was the concensus of those present that at least one Dinner-Seminar program involving the two professions should be held annually.

Nashville Academy of Medicine Davidson County Medical Society

Dr. Mary Calderone, Executive Director of the Sex Information and Education Council of the United States (SIECUS), addressed the Academy at its November 11 meeting. She also spoke of educators, parents, and representatives of health and welfare agencies at a meeting co-sponsored by the Academy, PTA's, and the local education association.

Other current Academy project include: Co-sponsorship of a Breast Cancer Detection and Education Clinic; Drug Abuse Education, in cooperation with the Woman's Auxiliary; coordination of a Disaster Handling Program with other groups involved; having team doctors at senior high football games, for the thirteenth consecutive year.

NATIONAL NEWS

The Month In Washington

(From Washington Office, AMA)

Health, Education and Welfare Secretary Robert Finch has asked a special Task Force on medicaid to examine and make recommendations on proposals for a sweeping national health program. The Task Force, headed by Walter J. McNerney, president of the Blue Cross Association, is scheduled to issue a report about the first of the year.

After referring to a proposal for universal health insurance endorsed by many governors at the National Governors' Conference, Finch told McNerney in a letter: "I would like specifically to request that the Task Force consider, along with its other deliberations on medicaid and related programs, what directions and initiatives you feel that HEW Department should pursue in this area."

According to McNerney, one phase of the study would include the extension of medicare to persons of all ages, roughly the national compulsory health plan backed by Walter Reuther of the United Auto Workers and his Committee of 100 for National Health Insurance. McNerney, however, also said that all types of mass plans would be studied, including the health insurance tax credit proposal endorsed by the American Medical Association.

The rapidly rising costs of medicare and medicaid have brought the issue to the forefront. The Administration said older people who enter the hospital after January 1 will have to pay for an additional $8 of their hospital bills due to the higher costs. The increase is required by law.

The benefit cutback results from an adjustment of the portion of the hospital bill for which a medicare beneficiary is responsible if these costs have risen substantially.

★

After a two-year study, Sen. Abraham Ribicoff (D., Conn.), former HEW Secretary, said he's reached the conclusion the federal health effort "is a planless conglomeration of programs administered by more than a score of agencies and departments." Federal health spending "instead of supporting programs to provide for the health of the people . . . is maintaining a cumbersome, disjointed bureaucracy that even key government officials have difficulty managing," he told the Senate.

Senator Ribicoff also said "Instead of eliminating problems, (they) may be adding to factors such as rising costs, limited access to care and the fragmented organization of health services. There are so many programs administered in such bureaucratic confusion that no one—not the HEW Department, not the Bureau of the Budget nor any private organization was able to tell the subcommittee even how many programs there are."

★

The American Medical Association told Congress drug dependent persons should be treated as patients rather than criminals. In testimony before the Senate Juvenile Delinquency Subcommittee, Henry Brill, M.D., chairman of the AMA's Committee on Alcoholism and Drug Dependence, said physicians are concerned over legislation before the Subcommittee proposing harsher penalties for persons unlawfully possessing drugs for their personal use.

Dr. Brill stated that "Mere possession for personal use of depressant and stimulant drugs having a legitimate medical usage should not constitute an offense. The degree of social hazard and the reasons for having the drug should be taken into account. With respect to the entire section on offenses and penalties, we propose an amendment to direct courts to appoint a panel of medical experts in each case where a drug abuser is brought to trial on a charge of illegal possession and where, in the court's opinion, medical treatment may be indicated. The panel would make a de-

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Bristol, Tennessee

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MEMPHIS DAIRY COUNCIL

DAIRY COUNCIL OF NASHVILLE

termination as to whether the defendant has a medical problem associated with his abuse of drugs—a physical or psychological disability or drug dependence."

Dr. Brill explained "If medical treatment is indicated, the panel would recommend to the court the type of treatment needed —that is, general—medical or psychiatric care; in-patient hospitalization or clinical treatment; group therapy; half-way house etc. If medical treatment is not indicated, or if measures in addition to medical treatment are needed, the court would then consider the non-medical handling of the case."

Under the proposed AMA changes, the HEW Department, rather than the Justice Department, would control the official classification of drugs, and the research and public education programs in the field. Control provisions would focus on manufacturers and distributors, rather than on physicians.

"We recommend that as a matter of public policy Congress explicitly charge the HEW Department with the major responsibility for research on all aspects of drug abuse and dependence other than enforcement," said Dr. Brill.

The AMA supports provisions in the legislation "which would allow researchers to withhold names of subjects, and to handle controlled drugs without prosecution, especially on state and local levels, has served to hamper needed research in the past."

★

The American Medical Association supported legislation to require foreign medical graduates trained in this country to spend two years of residence in their native land or land of previous residence before becoming eligible to apply for U.S. citizenship.

C. H. William Ruhe, M.D., director of the AMA's Division of Medical Education, said the measure would strengthen the Exchange Visitor Program. However, Dr. Ruhe suggested that the provision be strengthened to require that citizens of less-developed nations return to their home countries rather than their latest nation of residence. He cited the example of citizens of India who come to the United States from England.

"If such participants are required merely to return to England there will be no alleviation of the brain drain from India," he told the House Judiciary Subcommittee on Immigration.

★

The HEW Department's Children's Bureau was broken into separate health and welfare units. Under the reorganization:

★ Health programs administered by the Children's Bureau were transferred to the Health Services and Mental Health Administration (HSMHA) where they will form a new organizational unit. Programs included are for maternal and child health services, crippled children, maternity and infant care, and health of school and preschool children.

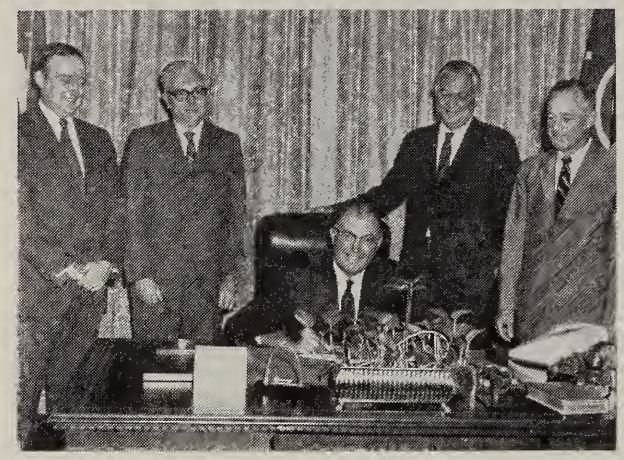
★ The Children's Bureau as such goes from the Social and Rehabilitation Service to the Office of the HEW Secretary, where it becomes part of the new Office of Child Development. The Bureau will maintain its role of leadership and coordination of child and parent programs throughout the Department. It will also continue to investigate and report on all matters pertaining to the welfare of children.

★ Community services administration is established in the Social and Rehabilitation Service to consolidate the administration of social service programs for children and adults. These include programs located previously in the Children's Bureau and in other agencies of the Social and Rehabilitation Service.

"I expect the Office of Child Development and the Children's Bureau to be vigorous advocates of the interests of children," HEW Secretary Robert Finch said. "They will work directly with public and private agencies to stimulate improvements in the availability and quality of services to children and parents, and to work with all agencies of HEW."

Secretary Finch said that maternal and child health programs will be strengthened by their placement in HSMHA. "All of the health programs administered by HSMHA should benefit from this new and closer relationship," the Secretary said.

MEDICAL NEWS IN TENNESSEE



Present for Governor Ellington's signing of the Proclamation regarding Community Health Week were, left to right: Mr. Bobby Pitts, Tennessee Hospital Association; Mr. Tom Sharp, Tennessee Pharmaceutical Association; Governor Buford Ellington; Morse Kochtitzky, M.D., Tennessee Medical Association; Mr. J. E. Ballentine, Tennessee Medical Association.

Community Health Week Observed

The 1969 Community Health Week, the seventh, was observed from October 19-25. The Community Health Week is an annual public service program established in 1962 by the House of Delegates of the American Medical Association. Under the direction of local medical societies, it is an event calling for joint participation by the various members of the local community health team in presenting meaningful programs of community wide interest. Its continuing theme is "Teaming Up for Better Health."

The Community Health Week has three basic purposes: (1) Focusing public attention upon the dramatic advances which have occurred in medicine and health care, (2) stimulating a greater public awareness of the growth, high quality and availability of health resources and facilities within the individual community, and (3) focusing attention upon current local health problems and needs.

University of Tennessee Medical Units

Chancellor Homer F. Marsh will leave the medical units early next year to join the staff of a new chain of private psychiatric hospitals. Announcing his decision, Dr. Marsh cited the opportunity of service in the field of Mental Health as a strong factor in his decision to leave the Chancellor post, which he assumed in 1961.

As Executive Vice President of Tranquilaire Health Services, Inc., a recently formed Memphis based organization, he will bear responsibility for establishing operational procedures and guidelines for a proposed chain of private mental health centers, as well as other services in the health field, including medical supply outlets.

Dr. Marsh will remain at the Medical Units for several months to assist in the transition of administrative responsibility. Dr. Andrew Holt, U. T. President, indicated that the search for a successor to Dr. Marsh will be directed by the Medical Units Selection Committee.

★

The Medical Units Arthritis Research Program, funded by a five-year grant from NIH, is now entering its major operational phase and needs additional new patients to accomplish its research. Conducted through the Department of Medicine, the program will investigate factors bearing on the onset of disease and study the natural history of arthritis to obtain better prognosis and compile statistical information about arthritis victims. Personnel in the research program hope by analysis of statistical information collected in laboratory psychological clinical and environmental studies to better define many aspects of arthritis. To acquire meaningful data, therefore, the program must have a large patient group.

Meharry Medical College

A $2,256,462 grant for the Matthew Walker Health Center of Meharry Medical College has been approved by the office of Economic Opportunity. The Health Center is scheduled to move into its new modern facility early this Fall. The new building is being built with a $1.5 million grant from the OEO and funds supplied by Meharry, as about one-half of the funds in the new grant will be used for salaries of approximately 135 employees of the Center.

Based on present OEO poverty guidelines, approximately 18,000 persons will be eligible for services from the new Health Center.

PERSONAL NEWS

Dr. William M. Cocke, Jr., has announced his association with **Dr. Greer Ricketson,** Nashville, for the practice of Plastic and Reconstructive and Maxillo-Facial Surgery.

Dr. Grant W. Liddle, professor and chairman of the Department of Medicine at Vanderbilt University School of Medicine, was the visiting consultant at a recent continuing medical education program on "Aldosteronism." This project was sponsored by the Tennessee Mid-South Regional Medical Program and held at the Baroness Erlanger Hospital in Chattanooga.

Dr. Robert Rhamy, Professor of Urology at Vanderbilt University Hospital, was guest speaker at a Tennessee Nurses' Association meeting at the St. Thomas School of Nursing in Nashville.

Dr. C. W. Kimsey, Chattanooga, recently spoke on the subject of "Quackery" at a meeting of the Chattanooga Sertoma Club.

Dr. Nat Winston, former Tennessee Commissioner of Mental Health, was a feature speaker at the annual meeting of the East Tennessee District of the Lions Club at Gatlinburg.

Dr. L. S. Whitaker, Medical Director of the School of Inhalation Therapy at Erlanger Hospital, has been appointed chairman of the 1969 Christmas Seal Campaign at Hamilton County.

Dr. Charles B. Keppler of Sewanee has been employed by the Multi-County Comprehensive Mental Health Center at Tullahoma as staff physician. Dr. Keppler began work with the Mental Health Center on October 1.

Dr. William A. Nelson, Jr., Knoxville Radiologist, has been reelected as President of the Cherokee Country Club for 1970.

The Board of Directors of the First Farmers and Merchants National Bank of Columbia recently appointed **Dr. Allyn M. Lay,** Mt. Pleasant, to fill a position on the Board.

Dr. Ling Lee, Memphis, was a guest speaker at an International Radiology Conference in Tokyo. Dr. Lee discussed a potentially revolutionary new technique for discovering brain tumors, a diagnostic procedure which has been developed and refined during the past four years at Baptist Hospital in Memphis.

Dr. David Karzon, Nashville, participated at a panel discussion on "Immunizations" at the annual meeting of the American Academy of Pediatrics in Chicago.

Dr. Leslie B. Reynolds, Jr. of the University of Tennessee Medical Units in Memphis was guest speaker at a local Rotary Club meeting in September.

Dr. J. William Hillman, chairman of the Department of Orthopedics at Vanderbilt University Hospital, was the guest speaker at a meeting of the Franklin County Bar Association in Winchester.

Dr. Eugene Regen, Jr., Nashville, gave a slide presentation of his recent work in Boenda, Africa at a meeting of the Lions Club in Franklin.

Dr. Louis Rosenfeld, Nashville, has been installed as President of the Vanderbilt Medical Alumni Association.

ANNOUNCEMENTS

Calendar of Meetings 1969-70

National

Nov. 30-Dec. 3	—American Medical Association (Clinical Convention), Denver
Dec. 6-11	—American Academy of Dermatology, Americana Hotel, Bal Harbour, Fla.
Dec. 7-9	—American Society of Hematology, Sheraton Hotel, Cleveland
Dec. 8-10	—Southern Surgical Association, The Homestead, Hot Springs, Va.
Jan. 11-14	—Society of Thoracic Surgeons, Regency Hyatt House, Atlanta
Jan. 17-22	—American Academy of Orthopedic Surgeons, Palmer House, Chicago
Jan. 30-Feb. 1	—Southern Radiological Conference, Grand Hotel, Point Clear, Ala.
Feb. 8-9	—Congress on Medical Education (66th annual), Palmer House, Chicago

The American Board of Family Practice

The American Board of Family Practice announced that it will give its First Examination for Certification in various centers throughout United States. The examination will be over a two day period on February 28-March 1, 1970. Information regarding the examination and eligibility for the examination can be obtained by writing:

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Lexington, Kentucky 40506

The University of Iowa Continuing Education Conferences

A Continuing Education Conference on Obstetrics and Gynecology will be held at the University of Iowa Health Center, December 4-5, along with a conference on Cardiac and Respiratory Disease, also to be held on December 5. Among the topics for discussion at the Ob-Gyn Conference will be organization and function of the perinatal mortality committee; genetics and human abortions; high risk pregnancies; the computer and gynecological practice; and the problems of the pregnant diabetic. Small group sessions will consider genetic counseling, drugs in pregnancy, diagnosis and treatment of carcinoma-in-situ, office Gynecology, and other subjects.

Respiratory disease topics to be considered will be management of acute respiratory failure and selection of the patient for external ventilation, office management of the patient with chronic obstructive lung disease, the beta-adrenergic theory of the atopic abnormality in bronchial asthma, and the significance of wheezing in lung disease. The cardiac sessions will deal with left ventricular outflow tract obstruction, mechanisms and treatment of cardiogenic shock, pediatric cardiology, endocrine aspect of hypertensive disease, and digitalis.

Conference registration forms can be obtained by writing: Director, Office of Medical Education, University of Iowa, 100 Westlawn, Iowa City, Iowa 52240.

AAP Releases Comprehensive First Aid Chart

The American Academy of Pediatrics has released a newly-revised comprehensive first aid chart which provides invaluable information on treatment of harmful injuries that most commonly occur among youngsters. The chart has been prepared by the Academy's Committee on Accident Prevention and Subcommittee on Accidental Posioning. It contains comprehensive information on first aid treatment for convulsions, burns and scalds, puncture wounds, head injuries, choking and other injuries. Measuring 11″ x 17″, the new chart is colorfully illustrated to accentuate the pertinent data presented. There is also a convenient place on the chart for the family physician's phone number.

Individual copies may be obtained for 20¢ a chart. The chart is also available at a 10 percent discount for quantities of 6 or more. Copies may be obtained by writing to Publications, American Academy of Pediatrics, P. O. Box 1034, Evanston, Illinois 60204.

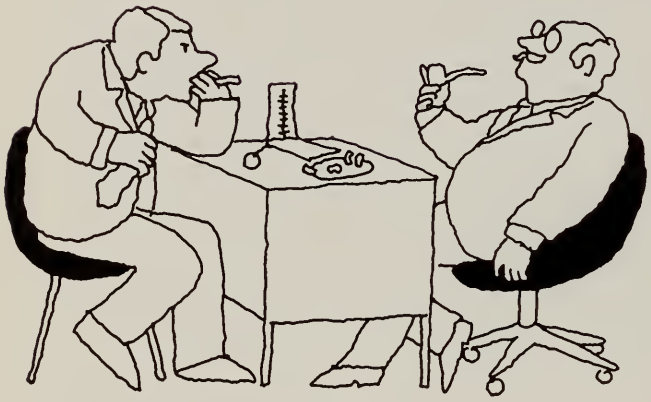
Occupational and Environmental Medicine Course Offered

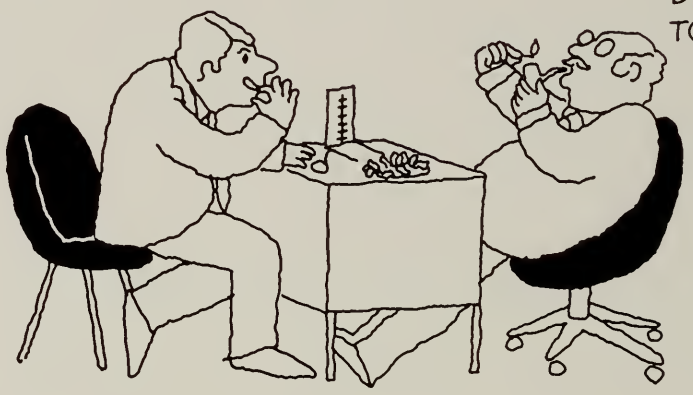
A full-time three-week course for physicians in Occupational and Environmental Medicine is being offered by the New York University Post-Graduate Medical School from March 9 through March 27, 1970. It will be given by the faculty of the Department of Environmental Medicine under the direction of David H. Goldstein, M.D.

The first week will be devoted to general and administrative aspects of occupational medicine, including history and philosophy, organization, occupational diseases, workmen's compensation and other legal and insurance subjects. In addition, this period will be concerned with the relations of the industrial physician with other health professionals, management, workers, unions and the community. The second and third weeks will cover basic scientific and clinical aspects, including toxicology, industrial hygiene, radiobiology, related community pollution problems, epidemiology and biostatistics.

Application should be made by November 1, 1969, as enrollment is limited to a maximum of 25 physicians. Tuition for the full three-week course is $375, and for the two-week segment (March 16-27) is $250. Applications and requests for further information should be sent to the Office of the Recorder, New York University Post-Graduate Medical School, 550 First Avenue, New York, New York 10016.

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A National Medical Forum

F. J. L. Blasingame, M.D.

Abstract—The many heterogeneous segments that influence medicine and its practice in the United States lack adequate means of communication. To relieve this need, and to promote understanding, the purview, responsibilities and privileges of the House of Delegates of the American Medical Association should be greatly expanded. A prestigious body is visualized that will be well informed by a committee structure representing all agencies active in providing medical care. Ample time will be available for deliberation. Such a national medical forum is essential if the problems of medicine are to be met with a coordinated effort.

In the past, organized medicine has served well, but its present structure and methods of operation are now proving inadequate to cope with the complicated problems arising within medicine and its environment. The expanding medical complex has grown massive and heterogeneous and consists of segments that can be generally identified as follows: educational group; research interests; medical-practice arena; facilities and suppliers; and the public sector, including government, as well as preventive medicine and public health, voluntary health agencies, third parties—unions, insurers and government (such as Medicare, Medicaid and veterans programs). In addition, one may mention involvement of federal, state and local governments in funding for facilities, research, and education; in regulating food and drugs, water and air pollution, and safety; and in controlling licensure.

A great deficit in communications exists and is growing within and among these segments and particularly so between them and any national medical body. Scores of groups in and out of medicine, meeting and communicating separately, lack an overall, respected forum for rational consideration of many matters of mutual concern. Confusion, indecision, hostility and wasted time could be lessened if, after separate consideration by interested parties, a top-flight forum existed that would offer opportunity for an exchange of information and an informed debate. Noticeably lacking is a structure that functions so that problems can be anticipated and reviewed, facts and opinions gathered, and decisions reached and implemented.

Perhaps, these and other circumstances caused a group of medical leaders several years ago to initiate plans to establish a National Academy of Medicine, a framework that is being worked out by the influential National Academy of Science and, it is anticipated, will become operational during 1970. The National Academy of Medicine will be a super group to attempt leadership in the entire health field since its organizers appear to think that no other roganization speaks for or co-ordinates the segments of the medical complex.

Modifying the American Medical Association

In addition to the formation of the National Academy of Medicine, organizational inadequacies could be lessened by the American Medical Association through innovations and adaptations that would enable it to fill the voids and give leadership by responding to current and emerging issues more promptly and effectively.

In our nation, the American Medical Association is the largest and most widely representative medical organization. Its House of Delegates traditionally has performed a useful purpose as a policy-making body. However, this does not mean that its mode of operation cannot be improved to keep step with the times.

The American Medical Association sponsors approximately a thousand meetings a year of its present committees, councils, sections, editorial boards, the House of Delegates and a variety of other separate meetings. Much of this work overlaps and is carried out with little co-ordination or sense of priority. Some have accused the Association of attempting too much and of appearing to spend more time on some traditional matters rather than on more urgent, basic issues.

The objects of the organization, stated in its Constitution, "to promote the science and art of medicine and the betterment of public health," are laudable, but specific objectives in behalf of the profession and the public should be clarified. Although its resources are substantial, they are limited, and their prudent utilizations demand more precise definitions of its scope and the establishment of priorities. Currently, the Association needs to clarify its purposes, intentions and programs and create an improved organizational structure that can give continuous surveillance to them at the highest level—in its House of Delegates. Failure to do so, especially with the expanded demands from modern medicine, has brought delay of actions and mounting of tensions.

As a symptom of a sense of inadequate performance, the House of Delegates in recent years has appointed several committees (each identified by the name of its chairman—Gundersen, Appel, Wheeler and Quinn) to study organizational problems. A few of many recommendations have been approved by the House of Delegates. Furthermore, a number of months ago, the House recognized the need for more attention to planning and development and established a committee for these purposes. In spite of many efforts, no report has come to the House of Delegates. The Board of Trustees of the American Medical Association has been groping and exhibiting frustrations. Recently, it ordered a limited survey of part of the organization, and it has announced a few implementations of recommendations. Such organizational behavior gives testimony that a churning exists and that change of structure and function may be imminent, though as yet not defined.

Modification of the House of Delegates

In the meetings of the House, the time spent by the delegates and the manner of using them have not changed for many years, even though the demands on medicine and the American Medical Association have progressively increased, especially in the last quarter of a century. Actually, the working time has been streamlined and may have been reduced. Under present arrangements, many of the delegates sense that their responsibilities are limited and that they are "kings" for a few hours twice a year.

If the structure of the House of Delegates were modified, and its responsibilities and deliberations upgraded, it could become the type of body necessary to give great assistance in the handling of current and future problems. The House could become a needed National Medical Forum and serve as the primary avenue of communications between medicine and other parts of the medical complex. Properly structured, the House could function and behave more effectively for medicine, thus lessening indecision and frustration. A recent survey of delegates to the Association showed that they had earlier been active in local medical organizational affairs and, often as a result of their activities, had been advanced to delegate status. However, after becoming delegates, approximately half of them were no longer participating in the state and county societies. Their geographic areas often had little follow-up by the delegates regarding the actions of the House of Delegates, thus creating defects in communication.

Blue Ribbon Committee

To initiate the study of possible modifications in structure and functioning of the House, a proposal was made at the 1968 Clinical Convention of the American Medical Association that the House of Delegates name a Blue Ribbon Committee to review the possibilities, carry out the initial spadework and report back to the House.[1]

Such a committee could consider such important items as whether the present federation of the American Medical Association should be continued and, if not, how it should be modified. Should the House of Delegates be altered in size and composition? Should it be bicameral, permitting some organic participation of certain groups —at least in an advisory capacity—not now represented, such as specialty organizations? Could certain groups be represented by delegates that would have all the privileges of the House except the right to make

motions or vote? How would such additional delegates be selected?

A further question to be considered is whether delegates are at present adequately representative of their constituents. How can such representation be assured?

How can preparations for House Conventions be made, and the meetings conducted to assure informed voting? Are present meetings too hurried? Are delegates required now to handle too much too fast, some of which is unfamiliar to them? Should they meet longer and more frequently? Should delegates and others serving the House receive monetary remuneration? Should it be equal for all who serve?

Also, should the House of Delegates have a better direction over the numerous Councils and Committees? Why should they not report to the House?

What are the inadequacies of the present role of delegates in acting as the advocates of physicians in the care of their patients, in implementing the decisions of the House, and in following through with their constituents?

Finally, should the House arrange to function as a national forum?

Obviously, this committee would have a crucial assignment, requiring members who were respected and wise. The recommendations could have far reaching effects, and the matters referred to the House would demand statesmanship of the highest order, in keeping with the complexity and significance of the problems facing medicine.

As will be noted from some of the suggested questions to be considered by the committee, the number, manner of selection and status of the individual delegate would be modified, and his role upgraded, making him a most influential, responsible person in organized medicine. This role, demanding but important, would shortly be sought by men who want to be involved where the significant action is taking place. Brain power, energy and concern would be attracted because they are applied by intelligent men where they are appreciated and where they can be effective.

Division into Sections

In brief, the House, composed of alert, informed delegates, would divide itself into sections whose combined missions would encompass the major areas of concern in the health field. The number of such sections required needs careful study. Areas covered by separate sections, to name several, could be medical education, science, services, finance and ethics. The sections might vary somewhat in size. Each could elect its chairman and other officers. With House approval, each section could create its essential councils, which could appoint numerous committees of knowledgeable persons. They would not necessarily be from the section or limited to physicians, thus opening a large reservoir of talented people to study various matters. By such echelons, work could be carried out and expedited. Yet essential co-ordination and control checks could be used to cause substantive reports to conventions of the House of Delegates for action.

Such sections, councils and committees would take the place of those existing presently in the American Medical Association, though many persons now holding positions could be included appropriately in the new arrangement. Although change is never easy, and internal political problems would arise, they would have to be faced and handled in a judicious manner. Few persons should object if they saw an expanded mission for their interests and a better organizational structure that would permit improved use of their efforts.

The present staff could service the House as reorganized; the cost of their meetings—many held in place of those of existing sections, councils and committees—would probably be approximately the same as at present.

The committees and councils would probably have to meet often and hold hearings as needed, depending on the subject matter. Such meetings would be staged between sessions of sections that might assemble four to six times a year, as need required, and report to conventions of the House. To consider the many items from the sections, the House would convene unhurriedly for several days about four times annually.

The present conventions, usually for a few hours twice a year, would not be suffi-

cient. Even now, the House of Delegates is handicapped because its members are called upon to take actions within a limited time on material, some of which may be unfamiliar to them. The possibility of an uninformed vote under present procedures is obvious and would be lessened by the proposed changes.

Under the suggested reorganization the functioning would be similar to that of the Congress of the United States through hearings of a wide variety and the gathering of facts and opinions from many sources, such as practicing physicians, educators, allied health workers, insurance and prepayment authorities, voluntary health agencies, labor, government, youth and the aged, minorities and others who desire to be heard. Thus, an informed and responsive House of Delegates could have a profound and constructive influence.

Through such a mechanism, physicians could learn directly the attitudes of various other groups and exchange the opinions of medicine with them. Priorities could be more readily identified, allowing attention to basic items. Much of the energy that now scatters facts and opinions would serve to gather and co-ordinate them. Indecision and waste, it is hoped, would be lessened. Understanding would be promoted. Reason and wisdom would have a better chance.

By some physicians and nonphysicians, the creation of such a National Medical Forum will be considered visionary and impractical. Assuming that they are concerned about the future of medicine as it faces gigantic, complicated issues, these persons may believe that the only feasible course is to follow the present one in the hope that piecemeal organizational changes would gradually develop and prove more adequate.

To help evaluate the merit of suggested modifications, possible effects of such a new approach on resolution or amelioration of tensions in a few problem areas should be considered. Also, it may be beneficial in several of these to look back and speculate on how such an ongoing review mechanism might have prevented some current problems or, at least, permitted their earlier detection.

Improvement in Communications

One of the chief benefits from an appropriate National Medical Forum would be improvement in communications—now more difficult and yet more necessary—within medicine and between it and the public. The expansion in knowledge and the creation of various groups of special, limited interests have made communications within medicine—among its various components, a task that has grown more and more complicated. Attention to a specialty has often proved demanding, dominating and preoccupying the interest of many of the best minds, so that these physicians have not always appreciated the overall problems of medicine. However, an increasing number of specialists and their organizations show a growing concern and are coming to recognize that all may not be well as they look to the future. Many of them are eager to join hands in some effective manner.

The unprecedented demand for health services has become almost insatiable, taxing the manpower and facilities and bringing stresses and dissatisfactions between medicine and patients. Enough dissatisfaction lingers to give apparent justification to attacks on limitations and imperfections in health services.

With improved communication, a National Medical Forum would give to physicians, many of whom now believe that they have little opportunity to be heard, a place to discuss their problems. No doubt, these physicians would spare the time and feel honored to make constructive suggestions if they could participate in a forum geared into the House of Delegates. Practicing physicians, better trained than their predecessors, deserve praise and respect for the quantity and quality of medical care being provided. The individual practitioner of today is in a highly defensible position. He is entitled to better support by organized medicine, for his concern is the care of patients, and he merits more understanding than he is receiving from some laymen. Much could be gained with patients if their

dissatisfactions and opinions were heard by an informed group acting in behalf of medicine. Some of the attacks being made on it might become more temperate and factual, and the response from medicine more timely and appropriate.

Admittedly, a commendable level of understanding regarding scientific advancements has been achieved between medicine and the public. However, equal success has not been attained in the matter of the delivery of health care and its financing. It is in these areas that the rub has come, and tensions have grown—as indicated by the crescendo of concern in health affairs by certain economists, sociologists, labor leaders, politicians and others. Many of these cry out for prompt, vigorous extensions of the benefits of medicine, principally through higher taxation and governmental spending and control. Although some of their presentations and contentions are obviously sincere and highly motivated, others smack of propaganda designed to lead to exploitation of medicine. Outcries come loud and often from the interventionists.

Effect of the Interventionists

Obviously, the fate of medicine in the United States will be determined principally by the course of interventionism in our nation as a whole. As society goes, so will go medicine. In recent years, the interventionists have been winning, and the end of their victories is not in sight. But signs of concern are showing in public opinion. A Gallup Poll taken in the summer of 1968 on a national sample indicated an upswing in fear of Big Government.[2]

Even some of the idea men among present-day liberals have expressed skepticism. Daniel P. Moynihan has spoken and written of the limitations of the state in handling social illness by money and welfare.[3,4] More recently, Peter F. Drucker has pointed out the "sickness" and shortcomings in government.[5]

The high cost of health legislation, with the inevitable elevation of already burdensome taxes, will inhibit, though not necessarily prohibit, passage of additional proposals by Congress and state legislatures. The government and many individual citizens are feeling the pinch and having financial difficulties. Caution appears to be the order of the day, especially after the enactment of numerous major health laws by the 89th Congress.

It is unlikely that the majority of citizens want more intervention by government in medicine, but they could have such an eventuality come upon them without their opinion being sought or known.

The interventionist frequently resorts to highlighting and picking on defects that are usually present in most situations, but hearing him can be beneficial to him and to medicine. He may have a point, and medicine can be strengthened by being forced by sound debate to determine that its position is well founded.

Taking the Initiative

Medical practices have always been a popular topic of conversation, natural to man's curiosity about himself. So much has been spoken and written about the place in society of medicine, its virtues and limitations, that confusion reigns. Debate rages without sufficient clarification of the issues. Many of the pronouncements lack substance, and some operate at a low level, resulting in the characteristics of a wrangle; truth is hard to come by, especially if the contentions are colored by emotion, hostility, and shallow do-goodism, or self-service.

A National Medical Forum could invite both medical and nonmedical persons to take the witness chair, make presentations and be exposed to questions and answers. The exchanges could only be helpful to all concerned. Such a setting might elevate the current and future debates and join and clarify the real issues.

The position of medicine would be much better if it extended such invitations and staged such hearings so that facts and opinions came out for evaluation. Again, medicine would be taking the initiative, would be in a position to hear and to learn, and to make necessary cogent responses.

Such a setting would give opportunity for wholesome, informative publicity quite in contrast to that occasionally associated with press comments when an American Medical

Association witness appears before an unfriendly Congressional hearing.

If such a National Medical Forum had existed on an ongoing basis during the last decade, many of the unresolved problems now confronting medicine could probably have been avoided or ameliorated. Earlier *medical-manpower decisions* could have been reached regarding the need for an increase in the number of physicians and for modifications in their training, as well as the types, roles and quantity of allied health personnel, and how their acquisition could be financed.

Medicine has been slow in pushing for an increase in the number of physicians. Only in recent months has the policy been enunciated that all qualified students who want to study medicine should be able to gain admission to a medical school. Yet thousands of such students continue to be denied the opportunity.

The cost of health care is now a major issue, both political and medical. Whereas labor and monetary policies of government are the principal causes of the general escalation of costs, medicine has experienced singular problems of supply of facilities and manpower in relation to demands. Few will question the opinion that current cost problems would be ameliorated if an abundance of medical manpower existed. The quality of care would go up, and costs would tend to go down. The resulting increase in competition would be helpful.

If a vehicle had been in existence to permit a ready exchange of information and opinions, decisions might have been reached that would have lessened the severity of the present manpower shortage. Also, wiser policies regarding the use of tax funds might have been hammered out years ago, and wider understanding and support obtained from workers in the health field, the public and the government.

Many in the health field proclaim the merits of a competitive system. Some of these persons, however, behave as if they place little faith therein and appear to fear the effect upon them and health care.

No adequate forum on *financing health care* has ever existed in medicine. Sustained, appropriate attention is required to this major problem involving massive sums of money and its prudent use in the creation of facilities and in purchasing services.

Over the years, great benefit could have accrued from multiple dialogues on such items as fringe benefits for health services. Another is labor-management bargaining, in which medicine has played no meaningful part in recommending how funds could best be used in purchasing health benefits. Voluntary health insurance and prepayment mechanisms, their objectives and designs, need discussing, as do tax funds—their sources, uses, and controls.

Health services have long been under review, but the results have been spotty and inadequate. The decision process has occasionally been slow and awkward. Better orientation toward satisfying the needs of a person who is ill would have been more helpful, emphasizing primary concern for him and recognizing his desires for more personalized services.

Greater emphasis could have been given to the physician-patient relation and its value to the ill patient as a part of a willing exchange between the two in a contract with the patient as the employer. The appropriate role of third parties could have been given much more consideration, so that they could assure lessening economic barriers to adequate health care but leave the essential freedoms to the patient and his physician.

A mobile and complex society in a country of various geographic and climatic conditions requires a wide diversity in methods used to meet health needs. Provision of care in a large city has to be different from that rendered in regions that are sparsely populated such as much of Alaska. Yet only recently, several prominent persons have asserted that no system exists in our country and further implied that systematizing would be a cure-all. Nevertheless, deficiencies in services result from distribution of physicians, overspecialization and shortages of better manpower to give more satisfactory services.

By involving a wide variety of citizens in an appropriate setting, could hearings on such health-service problems have failed to

have been beneficial? Such apparent concern on the part of organized medicine would have won much goodwill, encouraged favorable publicity and promoted support to help medicine.

Finally, although much emphasis has led to great advances in scientific medicine, *medical economics* has received insufficient attention from health workers and the academic community. As a result of ignorance in economics, the public and medicine have been wandering in a state of confusion with an Alice-in-Wonderland attitude.

The merits and limitations of the profit and nonprofit approaches in the health field warrant extensive study and objective evaluation that are long over-due. The effects of competition, as well as its economic consequences in the health field, deserve scholarly attention. The health field faces the growth in capital investment for profit in chronic-disease facilities and its more recent advent into hospital operations. Medicine will have to meet the inevitable problems arising therefrom.

Although general economics is now a concern of most university faculties, relatively few have specialists in medical economics who are tested, proven scholars. Yet it is a subject of such importance as to demand scholarship of high quality and objectivity. Quackery in medical economics is as dangerous and as intolerable as quackery in medical science.

Too long has medicine gone without an adequate arena into which could be drawn persons knowledgeable in various aspects of economics that affect medicine and medical people who have problems with an economic component. The necessity and value of such exchanges are obvious. Interest in medical economics would be stimulated. Ignorance of the subject would lessen, and more knowledge would encourage prudent behavior.

Function and Structure

In an organization, as with things, function is inseparably related to structure. Admittedly, the structural changes suggested would require major adjustments in the House of Delegates. However, such alterations could enable it to expedite more work and reach earlier wise decisions on many of the numerous, complex problems of medicine. Thus, the House of Delegates would assume an enhanced, deserved, respected and needed position of leadership.

If such a National Medical Forum is not created in and of the House of Delegates, it should feel obligated to review the needs and make alternative proposals how medicine can better organize to face current and future problems and attempt to resolve them, not necessarily leaving the void to be filled primarily by the proposed National Academy of Medicine.

If the health field and its organizations cannot adjust themselves to the demands made upon them, they are doomed to chronic frustration and possible failure. Neither is necessary nor desirable. The price is too high.

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Bibliographic references should not exceed twenty in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About it, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

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The use of telemetry in recording continuously the heart's action under physiologic stresses is a great aid in managing cardiac disease. It illustrates one of the mundane results of the Space Program.

Dynamic Electrocardiographic Monitoring

By ROBERT G. KIGER, M.D., Nashville, Tennessee

The physician's most ready tool for the objective assessment of coronary artery disease and cardiac arrhythmias is usually the standard twelve lead electrocardiogram. The problem, not infrequently, arises that the clinical impression of angina pectoris or an evanescent arrhythmia cannot be substantiated. In these instances, the conventional twelve lead electrocardiogram or one of the exercise stress tests (Master's test or treadmill) may not provide a representative sampling of the continuous activity of the heart.[1,2]

The concept of dynamic electrocardiography (DCG) has become more popularized with the NASA Space Program, and made practically available through a system created by Holter[3], and commercially introduced by Avionics Research Corporation of California. Recent medical electronic advances have eliminated bulky equipment so that portable units can record and store or transmit physiologic data—a technique known as telemetry. The concept of telemetry implies the transfer of data from the source to a final stage print-out or interpreting apparatus by some means other than "hard-wire."

The Holter technique of dynamic ECG monitoring allows storage of the electrical activity of the heart on electromagnetic tape as the subject carries on his usual daily activity without the need for medical supervision. The tapes are then rapidly analyzed on a scanning computer, requiring ten minutes to review a 10-hour recording. The clinician need no longer be limited to analysis during the brief period of a standard ECG (which records approximately only 1/500 of the heart's daily electrical activity) or during the short span of an exercise test. Indeed, the DCG can be recorded throughout the emotional and physical stresses of daily activity or as the patient actually experiences an arrhythmia or angina pectoris under specific participating stresses.

Method

The DCG system principally consists of two separate electronic devices: (1) a small 3½ pound portable ECG tape recorder, and (2) a combination scanner-computer for rapid screening of the tapes combined with an ECG charter to provide permanent tracings of the tapes on conventional electrocardiographic paper.

The tape recorder is a fully transistorized unit designed to run at 7½ inches per minute (and is powered by a small, long-life rechargeable battery) which allows continuous tape runs of 10 to 16 hours. A bipolar lead system inconspicuously attaches to the patient's chest wall and connects to the recorder by flexible lightweight plastic coated wires. The instrument is carried in a camera-like leather case by means of a shoulder strap or a waist band.

The uniqueness of the scanner-computer permits analysis of the ECG patterns at a tape speed 60 times faster than recording time. This allows compression of the time element for practical interpretation. For visualization of the ECG patterns, a unique method has been devised to superimpose each individual PQRST complex on each other on an oscilloscope screen. As long as the complexes remain unchanged, a single steady ECG configuration will remain on the oscilloscope. The effect is motion picture-like as ST segments are noted to depress or elevate and return to baseline,

or as T-waves change polarity. The appearance of intermittent, premature systoles or other arrhythmias which change configuration from beat to beat will appear as multiple images differing markedly from the constant ECG scanning pattern. For more conventional viewing, the actual recorded speed can be demonstrated by displaying a horizontal sweep of the ECG complexes.

A second oscilloscope can simultaneously display heart rate and rhythm on a calibrated scale. During the period of constant monitoring, the patient keeps a detailed diary of all activities with an entry made at least every 30 minutes. By means of a time-elapse clock on the apparatus, synchronization of activities with the tape recording permits a correlation of ECG changes with the patient's diary.

Comment

Conventional electrocardiography has two significant major limitations in interpretation and recording. These are related to the correlation of the ECG findings with a specific event in time and activity. Only a fraction of the daily electrical impulses from the heart (1/500) can be recorded on the standard ECG at rest. This does not necessarily represent the physiologic state of the heart during daily activities of work, recreation, rest, eating, etc.

All too often the ECG has been found to be normal between attacks of precordial pain or palpitation. Obviously, it becomes important to record an ECG during chest symptoms or other complaints. By recording on a tape monitor, this is in effect a "memory circuit" that can be reviewed in relation to the patient's symptoms at a convenient time by the electrocardiographer.

The clinical applications of continuous ECG monitoring are numerous. The detection of phantom arrhythmias and other intermittent ECG abnormalities has been described by Corday and associates,[4] using the Holter technique. DCG is also useful in describing intermittent attacks of ischemia and differentiating the chest pain of gallbladder disease, duodenal ulcer and hiatus hernia from angina pectoris, as pointed out by Norland and Semler.[5] Medical examiners for determination of disability for Social Security benefits have sought DCG evaluation in the Nashville area in situations where persistent chest complaints of the claimant has led him repeatedly to request an application for disability, only to be denied because of normal resting and exercise ECG's.

The concept of assessing work requirements with the treadmill following a myocardial infarction or after open heart surgery is being supplemented by the DCG system. As a patient is returned to increasing work demands, the physician can more accurately assess the stress of the situation on the heart. Industry is becoming more aware of this type of occupational health care, as reported by NASA's George C. Marshall, Space Flight Center, Huntsville, Alabama.[6]

Until recently, the evaluation of patients with permanent implanted cardiac pacemakers has been limited to intermittent office or clinic visits with a brief ECG strip or standard twelve-lead tracing. More sophisticated monitoring by the DCG monitor allows longer evaluation for detecting intermittent pacemaker failure, frequency of arrhythmias, changes with stress, development of competitive rhythm and causes of recurrent syncope.

Now that continuous ECG monitoring has become well entrenched in the cardiac care units, the next revolutionary steps should be toward "step-down" monitoring or ambulatory monitoring as the patient is weaned from bedrest following myocardial infarction, surgical procedures or a severe illness. There is no need to guess what is happening to the patient's heart as increasing stress is added. The presence of arrhythmias during the first stages of ambulation may herald a terminal event and yet go undetected by our usual methods of clinical evaluation.

The list may be legion, but finally a fairly common application of the DCG is in the assessment of cardiac drug therapy. The actual incidence of premature systoles may be assessed before and following the administration of anti-arrhythmic agents. The duration of quinidine's action may be observed accurately, as the QT interval lengthens only to shorten as the drug effect wears off. It can be quite revealing for an

individual patient to know where maximal drug effect ends so as to lessen potential breakthrough arrhythmias by proper dosage adjustment.

Middle Tennessee is now privileged to have a central monitoring station at St. Thomas Hospital in Nashville where tapes can be scanned on a mail-in basis and a full narrative interpretation rendered. By funds from the Middle Tennessee Heart Association, several portable recorders are available upon request to physicians in the Middle Tennessee area. The service is available as a laboratory procedure and costs adjusted according to length of monitoring time.

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Scoliosis in the growing child may lead to a serious deforming disability. Means should be used in those needing treatment to correct for this lesion. Treatment is quite successful in most instances.

Some Concepts in the Management of a Child With Scoliosis*

THOMAS F. PARRISH, M.D., Nashville, Tenn.

Management of the growing child with scoliosis has long been a problem, and treatment has ranged from doing nothing, through exercises, braces and casts, to extensive surgical fusion of the involved spine. During the last 6 years, we have developed a scoliosis clinic within the Crippled Children's Service for Middle Tennessee. Careful analysis of the patients followed in this clinic has delineated certain treatment criteria for the best management of specific types of scoliosis.

Materials and Methods

For complete analysis, this series consisted of 72 patients who were seen consecutively in the scoliosis clinic and were critically re-evaluated in the latter months of 1968. Fifty-two of these patients were female and 20 were male. The ages, when first seen, ranged from one year to 19 years of age. Forty-eight of these patients had idopathic scoliosis. Eight patients had one or more hemivertebrae, sometimes associated with other congenital anomalies. There were 2 patients with infantile scoliosis and one with juvenile scoliosis. Nine children with scoliosis were found in association with some neurologic disease; 2 patients had cerebral palsy, 2 patients Friedreich's ataxia, one patient poliomyelitis, 3 had von Recklinghausen's neurofibromatosis, and one patient Guillan-Barre's disease. Two patients developed scoliosis following irradiation for a Wilms' tumor. One patient had congenital heart disease which had required valvular surgery, and one patient had an upper dorsal scoliosis from a tight sternomastoid muscle.

Findings

In this series of 72 patients were 22 who did not require any treatment. Review of these 22 patients revealed that they had minor curves with insignificant deformity, and since the patients were at or near full growth, treatment would have been expected to affect the deformity too little to warrant treatment. All the curvatures worsened until the child reached full growth.

In 20 patients, the Milwaukee brace[1,2] was used as the sole method of treatment. This brace has been used effectively in the young child in whom it was believed that spinal fusion would shorten the trunk excessively. It has also been used very successfully in the older child in whom it is thought the child is very nearly fully grown, that is, with two or three years of full growth. The average curve in this group of patients measured 42 degrees when first seen, and we were able to correct and to maintain an average of 8 degrees for each patient treated. Further analysis of this group of patients revealed that, in spite of our most vigorous efforts, one curve continued to grow worse, and by the time it became stable it had increased by 13 degrees. The best correction ever obtained was 27 degrees.

Seven children underwent spinal fusion without internal fixation. These patients were actually treated before 1963, but have been followed subsequently in the scoliosis clinic. The average curve measured 52 degrees when first seen, and we were able to correct the curves by an average of 11 degrees for the whole group. One patient's curve actually increased 9 degrees after spinal fusion, and the best correction ever obtained was 32 degrees.

More recently, spinal fusions have been done by using Harrington rods for internal correction and fixation.[1] In this group of 22 patients the average curve, when first seen, measured 61 degrees, and we were able to correct the curves by an average of

*From the Crippled Children's Service of Middle Tennessee, Nashville, Tenn.

21 degrees. However, in one patient, the curve actually became worse in spite of apparently proper use of the rods, and a total of five degrees was lost. We were able on one occasion to correct the curve as much as 63 degrees.

Discussion

From this series of patients it is apparent that, regardless of the cause of the scoliosis, with the head and shoulders well-balanced over the pelvis and if the child is within a year of maturity, no treatment need be done. Usually the curve should not be over 40 degrees and preferably less. In the child within two years of maturity, and with a curve of more than 40 degrees which is certain to worsen, and if the body is well-balanced, the use of the Milwaukee brace has proven very satisfactory. This brace not only prevents the curve from worsening but actually improves the scoliosis.

We have advised spinal fusion for the child with an unbalanced trunk, and our best results have been with the use of the Harrington distraction rods which greatly aid in correction and immobilization. We have applied plaster casts from the chin-occiput to and including the pelvis, and these casts are very carefully molded over the iliac crests. Therefore, these patients are much more comfortable during the post-operative period and are allowed to be ambulatory two to three weeks postoperatively. On the average they have been immobilized in plaster approximately 7 months.

There were some complications associated with spinal fusion. In the series of 29 patients who underwent spinal fusion, there was one wound infection, and this patient probably developed a pseudarthrosis. It did not require refusion, the curve did not worsen, and there has been no recurrence of infection for more than 5 years. In 2 patients the fusion apparently did not extend sufficiently far cephalad and the curve, therefore, increased over the best correction obtained. In neither patient was the increase sufficiently severe to require further correction and extension of the graft. In 2 patients one of the distraction hooks of the Harrington apparatus came out. The fusion mass was explored in one of these patients and found to be sound, and the other patient appeared to have a sound fusion but did lose some of the original correction. One patient developed a pseudarthrosis in spite of the presence of the Harrington distraction rod and required refusion.

Summary

1) All children with scoliosis, whether functional or structural, must be followed clinically and radiographically at intervals of 3 to 6 months for proper and repetitive evaluation.

2) It appears that all children with structural scoliosis will worsen, and, in our experience, scoliosis caused by hemivertebrae worsen.

3) A child with structural scoliosis, from whatever cause and in whom it is apparent will become significantly deformed and/or imbalanced, should undergo spinal fusion. Use of the Harrington rods has greatly facilitated the technique of spinal fusion and has improved the correctibility of the curve.

4) Scoliosis in association with neurofibromatosis should be fused as soon after the diagnosis is made regardless of the age or sex of the patient, otherwise such curves tend to become terribly deforming.

5) A child with scoliosis, who does not exhibit imbalance and who is within two years of growth, can be managed with a Milwaukee brace.

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The authors, in reviewing the increased secretion of this hormone following cardiac surgery, believe that this alteration is within the limits of physiologic action and thus is not inappropriate.

Antidiuretic Hormone Secretion: Its Relation to Cardiac Surgery and Injury

ROBERT L. RICHARDSON, M.D., HANNELORE GILES, M.D. and JAMES W. PATE, M.D., Memphis, Tenn.*

Introduction

The syndrome of "inappropriate" antidiuretic hormone (ADH) secretion has been associated with a wide variety of clinical situations including malignancies,[1,4] pulmonary diseases,[2] disease or injury of the central nervous system,[2,5] following hemorrhagic shock,[6] and postoperatively—especially after mitral commissurotomy.[7] Except for malignancies in which a ADH-like substance can be extracted from the tumor itself, the increased secretion of the hormone apparently follows stimulation of various chemoreceptors and baroreceptors located in strategic areas throughout the body. In cases of severe injury or cardiac surgery the response of water retention and hyponatremia is more likely the normal response of the body's homeostatic mechanisms and is not at all "inappropriate."

Discussion

The clinical characteristics of inappropriate ADH secretion are: (1) hyponatremia with continued sodium loss in urine (24-hour urine sodium $>$ 20 meg. unless on low sodium intake); (2) urine osmolality which is greater than that of the plasma (except in isotonic expansion of the extracellular fluid volume in which the urine may be hypotonic to the plasma); (3) normal or slightly increased blood and extracellular fluid volume; (4) normal renal/adrenal function; and (5) fluid restriction resulting in an increase in serum sodium and a decrease in urine sodium.

A brief review of the physiology of water metabolism reveals that normal hydration is an exquisite balance between fluid intake and total body water lost.[6] During consciousness the fluid intake is governed by thirst-drives arising from the drinking center adjacent to the supraoptic nuclei on each side of the hypothalamus. The basic stimulus to thirst-drives is neuronal intracellular dehydration. This has been produced experimentally by the injection of hypertonic saline as well as by electrical stimulation of the drinking center.

The four most important clinical causes of thirst are: (1) extracellular dehydration, (2) low cardiac output, (3) intracellular dehydration, and (4) dryness of the mouth. However, there are also many other more subtle factors which recently have been exposed as potential stimuli. These include trauma, pain, anxiety, certain drugs, positive pressure breathing and increased left atrial pressure.

Regulation of water loss from the body is determined by the osmorceptor-ADH hormone system. The four important parameters in this system are the hypothalamus, the neurohypophysis, ADH, and the renal tubules. In essence, the ADH is secreted into the blood stream by the supraopticohypophyseal axis of the hypothalamus and neurohypophysis and results in the increased reabsorption of water from both the distal tubules and the collecting ducts of the kidneys. The hormone secretion is regulated by osmoreceptors in the anterior hypothalamus which respond to changes in extracellular fluid concentration. Impulses from the osmoreceptors are transmitted through the pituitary stalk into the neurohypophysis resulting in increased secretion of ADH. These osmoreceptors are extremely sensitive so that an increase of 2% in the plasma osmotic pressure is sufficient to inhibit a water diuresis.[8]

The plasma levels of ADH in normal individuals are difficult to determine under

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present laboratory conditions. Bioassay techniques involving the pressor and antidiuretic properties have been applied to the rat. In addition, several plasma extraction techniques are available but are arduous and are quite variable in their sensitivity. Radio-immunoassay studies are in process and will offer greater specificity and accuracy. Plasma levels of ADH are reported in micro pressor units/ml., where one unit is equivalent to 2.5 picograms of arginine vasopressin.

Gupta and associates,[9] determined plasma ADH levels by chemical analysis and found the mean ADH levels of 0.41 and 0.37 micro units/ml. in normal males and nonpregnant females respectively. They did not find increased levels in edema associated with congestive heart failure, nephrosis or third trimester pregnancies. In 5 cases, each of congestive heart failures and nephrotic syndrome, 24 hour excretion of ADH was measured. In the former, 48 to 150.5 micro units/ml. (mean 99.2) were excreted and in the latter, 36 to 95 mirco units/ml. (mean 66.1) were determined. On the basis of these findings, they conclude that ascites and edema in cardiac and renal disease as well as that of the third trimester of pregnancy is not primarily due to increased levels of ADH.

Morau and Zimmerman[10] observed serial ADH in 8 patients undergoing surgical procedures-spanning the basal preoperative period, the surgical procedure, and extending postoperatively to the fifth day (blood losses were replaced to minimize the effect of hemorrhage). Their results show a marked rise associated with any visceral manipulation with a leveling off at 6 to 12 hours and a slow decline to normal preoperative levels. The response to visceral manipulation was not abolished by truncal vagotomy nor did overhydration suppress the ADH response during surgery.

In animal experiments these investigators also found a 26% decrease in levels of ADH following balloon inflation of the canine left atrium, with a concomitant diuresis. With sudden release of the balloon, two to six-fold increases in ADH were observed and it was postulated that the release of left atrial hypertension stimulated the release of ADH and resulted clinically in the "post commissurotomy syndrome." Similar findings were described earlier and were found to be abolished in the presence of bilateral cervical vagotomy.[7]

These receptor sites of the left atrium are the only low pressure receptors known to affect ADH levels in the functional classification used by Gauer and Henry[8] which divides the cardiovascular system into low and high pressure circuits. Other low pressure receptors occur in the systemic capacitance vessels, the right heart and pulmonary vessels, and the left ventricle during diastole. Here, small changes in volume are reflected by relatively large changes in pressure. Even a moderate reduction in blood volume can result in elevated levels of ADH for a prolonged period. In the arterial receptor system baroreceptors are located in the aortic arch and carotid sinuses but do not become active until a significant decrease in mean aortic pressure occurs.

The observation that antidiuresis follows positive pressure breathing was studied in the rat by Tarak and Chaudhury.[11] It has been thought by some that this could reflect increased volume in the low pressure areas of the right heart, pulmonary vascular tree and left atrium. However, Tarak and Chaudhury administered angiotensin to eliminate the resultant arterial hypotension and successfully blocked the antidiuresis.

The following factors may be present in any patient who has suffered extensive trauma or after open-heart surgery:

(1) Hemorrhagic shock and recurrent hypotension
(2) Extensive trauma to low pressure receptor sites of the right heart and pulmonary vessels
(3) Acute left ventricle failure
(4) Positive pressure respiration
(5) Blood volume alteration secondary to cardiopulmonary bypass, hemorrhage, intravenous fluid therapy and recurrent pneumothorax
(6) Psychogenic polydypsia

In these patients there is an initial tendency to call the hyponatremia and water retention "inappropriate" ADH secretion. Actually this response is very appropriate to the patient's disease or injury.

Summary

A brief review of the many facets of stimuli which alter the secretion of ADH is presented. The relationship to cardiac surgery is stressed and the supposition is made that increased ADH secretion is not at all "inappropriate" in these patients.

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The authors evaluate the psychologic factors which lead to riots and thereby suggest methods of control.

Riots: Psychologic Techniques of Prevention and Control

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In general, when we consider psychologic operations and techniques of behavior control as applied by military or paramilitary forces, the target populations are assumed to be "the enemy" and both nationally and culturally separate from ourselves. In fact, when consideration of techniques for psychologic operations is suggested relative to members of our own population, there is initially a reaction of distaste if not actual revulsion. It is our feeling that this initial reaction, while understandable, is not a luxury we can afford in our present state and national situation.

Whether deliberately or not, certain techniques of controlling behavior are being applied by various individuals in direct activities and through the news media. One has only to consider the impact of television appearances by militant leaders, reports of recent political developments, or review the experiences published by the Tennessee Military Department of "Operations Memphis-Nashville"[1] to be made aware that these techniques are being used in the *production* of civil disturbances and/or capitalization by various groups on such disturbances.

To those who feel techniques of behavior control and similar approaches are inherently improper and/or immoral, one can only point out that psychologic techniques aimed at "defusing" or preventing riots are far less hazardous and more economical than the tragic results of armed violence which results in inevitable injuries and even death.

Certain characteristics of crowd behavior are pertinent to the kinds of events that may occur in a riot-prone situation. Among these, and perhaps most critical, are the feelings of anonymity and impersonality in members of a crowd or mob. That is, the individual does not feel personally responsible, but rather that he is involved in a group activity and any responsibility which exists is carried in an amorphous concept. Thus, the amazing susceptibility of crowd and mob situations is not surprising. There is also an emotional contagion with communication of feeling which provides a psychologic unity even when other bases of social integration are not present. Anonymity and the emotional responsivity tend to minimize self-discipline and maximize the expression of inner impulses, many of which may be violent.[2] It should be emphasized that this phenomenon of emotional contagion rises in proportion to the rate of communication possible from group to group.

This explains some of the massive spread of violence from city to city as the communicative process carries news as soon as events occur on the assumption that it informs, inform it may—inflame it will! Because of the hazard of contagion it may be of critical importance for the news media, particularly the visual media, such as television, to delay publication of certain riot and riot-prone situations in order to avoid the hazards. It is felt this will be possible on a voluntary basis, but it is considered necessary. Some may see this as censorship—it is not. The speed of communication in our present world is so rapid that simply *delaying* communication of certain events mean the difference between control of an isolated incident or violent riot situations in a number of areas throughout the state and nation. The hazards are so profound that either self-restriction and/or legal restriction upon certain news media, particularly television, may be absolutely essential.[3]

Because of the characteristics of crowd

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behavior as described, the vulnerability of crowds to charismatic leadership in almost any direction and degree from peacefully returning home, to "killing Whitey," gives the skillful agitator fertile ground in which to sow his seeds of discontent. However, this may occur whether the leader in question is solely motivated by noble aims as has occurred with certain clergymen, or whether his presence and involvement is clearly planned for the purpose of disrupting and, at times, destroying the political structure. Identification of potential leaders prior to such events may be a matter of critical necessity. If such emergent leaders can be found and enlisted in the direction of minimizing hazards, the probability of a crowd becoming a mob and leading to a riot is greatly diminished.

The group of maximally involved/riot-prone individuals should be identified. There is significant information in this regard and the recent paper by Lubie, Mendelsohn, Fischaff and Weymer[3] suggests certain important factors. It may be noted that while their report on "The Detroit Riot; some characteristics of Those in the Street" addresses itself to a limited area, similar characteristics seem present in certain university riots of the past few years. The rioters are "remarkably homogeneous." The majority are young, predominately in the 17 to 27 age group, and single. Over 50% were raised in families with a total or intermittent absence of father. Generally speaking, not only were there no marital ties, but there was a minimum of group involvement and most belonged to no formal organization either community or radical.

It is believed that the specific target group and psychologic techniques designed to control and prevent riots is therefore somewhat well defined: (1) it is young; (2) there is a minimum of relatedness to individuals or groups; (3) on the basis of the age group, one can predict specific cultural determinants of behavior which can be utilized in dealing with violent aggressive expression; (4) on the basis of the age group, television would be far more potent in reaching this particular target group than publications; and (5) the language of the approach and techniques of expression should be compatible with the communicative style of the young rather than the "over thirties."

Specific objectives which are extremely important to the target group would include the formation of organizations whose activities would satisfy some of the realistic and worthwhile goals of the individual, and provision of sources of legitimate prestige to both the organizations and individuals. Because of the marked alienation of the individuals who are most riot-prone, the encouragement of a sense of belonging in both social and political organizations is extremely important. In this regard, recent suggestions toward providing the voting right for age 18 may be of significant value. In this age group the feeling of moral alienation from their elders and belief that most older people do not have a real concern for equity can and should be alleviated by communicative techniques and, more importantly, by actual demonstration. This may be a very significant factor in the management of crowds by police and other agencies to avoid the crowd-riot progression.

In any approach, there are certain themes that should be guarded against. Among these are: (a) behavior or statements indicating boasting or sneering by the controlling forces; (b) any ridicule or degradation of the potentially rioting group; (c) name calling; (d) use of obscenities or oaths; (e) sexual stimulation (This may be particularly important because of the frequent correlation between sexual excitement and aggressive behavior, which is most marked where the opportunity for actual sexual satisfaction is minimal—it quite often is in this group—and the sexual drive may be converted to aggressive behavior.); (f) promises, unless clearly fulfillable; and (g) devisive techniques addressed to the family.[4]

We have attempted to indicate some of the problems and some of the considerations in the psychologic techniques of the prevention and control of riots as they appear to a communication specialist and a psychiatrist. The importance of using these techniques cannot be over emphasized. It is no exaggeration to say that the community and perhaps the country is dependent upon ways being worked out to deal with

these problems which do not involve further polarization of the various components of our society; notably black and white, and young and old with the hazards on both sides. Because of the critical importance it is strongly recommended that the agencies which are responsible for the controls of such situations in this state, most notably the various police departments, the State Police and the National Guard have available to them specialists in the behavioral sciences and communication specialists. These can advise to specific psychologic activities and the psychologic implications of existing programs so preventative aspects can be more fully exploited and the potential which unfortunately exists at times for precipitating riots can be minimized.

In addition to consultative help, it is urged that all officers and others concerned with riot prevention and control familiarize themselves with the various manuals pertaining to psychologic operations as well as riot control prevention. The appearance and training of personnel who are likely to be involved in riot situations should be carefully observed and professional bearing emphasized. The experience of the London Police officers in handling such situations is a tribute to the professional standards and status of their personnel.

The characteristics of the riot vulnerable group suggest needs for further action in the formation of organizations providing sources of satisfactions and efforts to demonstrate concern for their legitimate needs by not only the police and National Guard officers but by the entire community. In these efforts we should use the communicative tools most available and accepted by the group, and we should not underestimate the importance of what their words and behavior have to say about our own value system. They have indicated that they see us as uncommitted and irrelevant. In a measure they are right. Perhaps in our shared concern we may, old and young, black and white, become more relevant and more committed to meaningful goals together.

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* * * * *

TAKING THE BLOOD PRESSURE: Geoffrey E. King, M.D., JAMA 209:1902, 1969

An essential part of the physical examination in all patients is *taking the blood pressure,* whether for the making of clinical decisions or as a research tool in epidemiology. A "machine measurement" may lead to overconfidence in the sphygmomanometer and predispose to error in clinical assessments if the potential errors of sphygmomanometry are not recognized.

Sources of error in sphygmomanometry have been clarified by recent research. Some elementary precautions to obviate errors of technique are: 1) use of a manometer capable of following rapid cuff pressure changes; 2) accurate calibration of aneroid manometers if used; and 3) awareness that the hydrostatic level of the arm in relation to the heart may influence results.

High readings may result from the failure of the cuff bladder to completely encircle the arm, as with an obese patient. A cuff containing a bladder at least 40 cm. long should be used to reduce random errors. Observer bias in blood pressure readings may prove unimportant in view of the sampling error associated with infrequent determinations. Such errors can be reduced more effectively by taking multiple readings on separate occasions than by multiple readings on the same occasion. The origin of the Korotkoff sounds remains an enigma; however, studies imply that the "silent" diastolic endpoint be the preferred index since it is related to smaller random errors. (*Abstracted for the Middle Tennessee Heart Association* by Robert G. Kiger, M.D., Nashville.)

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CASE REPORT

Pancreatic Abscess Secondary to Acute Pancreatitis

R. M. Bransford, M.D., Texarkana, Texas, and
Joe F. Bryant, M.D.,* Lebanon, Tennessee

An abscess of the pancreas is an uncommon but serious complication of an episode of acute pancreatitis, and may present a confusing picture that is often misdiagnosed. The first successful treatment of this condition apparently was reported by Davis in 1917.[1] Baldwin,[2] in 1935, reported a case of abscess of the pancreas which was not found at operation and only a cholecystostomy was performed; the abscess was found at autopsy.

The most frequently quoted cases of pancreatic abscess are those by Altemeier and Alexander[3] in 1963, in which 32 cases were presented.

Farringer, Robbins, and Pickens[4] reviewed the records of patients with pancreatic abscesses who were admitted to the Baptist, Vanderbilt, and St. Thomas hospitals in Nashville during the years 1954 through 1965. There were 691 admissions for acute pancreatitis with only 7 cases of pancreatic abscess. The patients with pancreatic abscesses constituted 1% of the patients having pancreatitis.

Steedman, Doering, and Carter,[5] of Los Angeles, reviewed the literature in 1967 and found 90 reported cases of pancreatic abscesses in the past 60 years and added an additional 13 instances.

Etiology

The most common cause of pancreatic suppuration is antecedent pancreatitis. Other causal factors are trauma, periarteritis nodosa, pancreatic foreign bodies, occulsion of pancreatic ducts by parasites, and pancreatic biopsies. Irrespective of the exact cause, the development of acute pancreatic necrosis with its inflammatory exudate predisposes to pancreatic suppuration.

Six of the 7 patients presented by Farringer and associates were admitted for acute pancreatitis. Four had biliary tract disease. In the remaining 3 patients no etiologic factors could be established.

The abscesses may be located in the left subphrenic or retroperitoneal spaces, bilateral subphrenic spaces, or lesser sac.

Clinical Findings

The delay in diagnosis until the time of autopsy in one-third of the patients presented by Altemeier and Alexander emphasizes the obscure nature of pancreatic abscesses. The symptoms and physical findings are abdominal pain, tenderness over the abscess, fever, nausea, vomiting, palpable mass, abdominal distention, weight loss, shock, jaundice, and stupor.

Roentgenographic studies are very helpful in making the diagnosis. One may find an elevated diaphragm, gas within the abscess cavity or displacement or extrinsic defect of the stomach, duodenum, or colon.

Pancreatic abscesses may lead to extension to adjacent anatomic spaces, diabetes mellitus, recurrent abscess, septicemia, perforation into peritoneal cavity, arterial errosion with exsanguination, gastric or duodenal ulcers, persistent pancreatic fistula, pancreatobronchopleural fistula, wound abscess, metastatic abscesses, incisional hernia.[6] Treatment should be directed toward early diagnosis and operative drainage and antibiotic treatment.

Case Report

A 67-year-old white woman was admitted to the Wadley Hospital, Texarkana, Texas, on February 8, 1969, with an 8-hour history of severe upper abdominal pain.

The patient was not relieved by any type of medication. She had had no previous similar episodes. There was radiation into both shoulders and the left lower chest with dyspnea. There was no food intolerances, and the patient had never used alcohol.

Physical examination on admission revealed an acutely ill patient with a T. of 100°, BP of 130/90, and without evidence of jaundice. There was splinting of the left hemithorax with some decrease in breath sounds at the left base, sinus tachycardia, diffuse tenderness across the upper abdomen with marked guarding and some rebound. No bowel sounds were heard.

Medical treatment for acute pancreatitis was instituted. X-rays revealed ileus with bilateral pleural effusion, maximal on the left. Serum amylase was 1,770 units, calcium 8.2 mg., blood sugar 132 mg., and total serum bilirubin 0.9

*From the Nashville Memorial Hospital, Nashville, Tennessee.

mg.%; SGOT was 29 units, alkaline phosphatase 4.5, and hgb 17 gm.

The patient was critically ill on admission requiring 7,000 ml. of fluid to maintain pressure and increase urinary output. She then developed evidence of borderline failure with a venus pressure of 17 mm. of water and was digitalized. The 3rd day she became extremely dyspneic, and had bilateral reflex pleural effusion, and was deteriorating rapidly. A tracheostomy was performed and a left thoracentesis was done with marked improvement of respiratory distress. At this point the patient was developing left flank induration and discoloration and a T. of 104, and P. of 120. She was started on steroids, and following this began to improve rather rapidly.

On the 6th hospital day total proteins had decreased to 3.8 Gm., with albumin, 2.0 and globulin 1.8 Gm. The patient required albumin and calcuim intravenously with daily fluids.

On the 24th day the patient complained of discomfort in the left abdomen and left flank. Physical examination revealed an abscess pointing in the left flank. The intravenous pyelogram was normal, barium enema showed only diverticulosis. Two aspirations yielded 650 ml. of yellowish-green fluid with negative cultures. Hypaque was injected into the large retroperitoneal abscess as shown in figure 1.

The patient was transferred to the Nashville Memorial Hospital and underwent local incision and drainage of the large abscess. She was discharged on the 40th hospital day. Cholecystogram showed a poorly functioning gall bladder and will be repeated later.

The patient continues to do well except for drainage from the abscess and is being observed for further complications.



Fig. 1. Shows the large retroperitoneal abscess outlined by Hypaque.

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The author emphasizes the advantages of proposals made in the past, of centers for the management of such injuries occurring in civilian life. Their practicability has been established for the military. Not only would they result in reducing morbidity and mortality, but would provide for ongoing education of younger generations of surgeons.

Notes on Penetrating Craniocerebral Trauma*

ARNOLD M. MERIOWSKY, M.D.†

Prompt, definitive surgery is of the essence in the management of penetrating wounds of the brain, if mortality and morbidity are to be held to a bare minimum. Expanding intracranial hematomas, commonly associated with these wounds, require rapid surgical attention. Prevention of infection is heavily dependent on the time factor.

In his monograph published in 1910, Major Paul Edward Straub[1] defined the ultimate objective ". . . to bring the patient, the facilities for his treatment, and the surgeon in conjunction under the most favorable circumstances." And he concluded that ". . . the transportation of the institution to the patient, rather than the patient to the institution, is a sound principle whenever circumstances permit."

It was with these thoughts in mind that a two-echelon system was established in the Korean War.[2] Evacuation by helicopter from Battalion Aid Station to Mobile Neurosurgical Team made prompt definitive surgery feasible. A neurosurgical center in the rear was equipped to handle the subacute phase of postoperative care and to manage complications. This system made it possible to save lives of men with rapidly expanding intracranial hematoma. It was also largely responsible for the reduction of infection from 41% to less than 1%. Translating this into the organization of management of patients with head injury in civilian life, a similar system is indeed feasible once strategically placed head injury centers have been created.

*Presented at the Twenty-Second Annual Meeting of the Neurosurgical Society of America, Key Biscayne, Florida, 1 May 1969.

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Management of Penetrating Wounds

It might behoove us to review briefly some of the surgical measures which have proven their worth in the operative management of penetrating craniocerebral wounds. Radical debridement of all layers of scalp with curvilinear extension of the laceration and en-bloc excision of depressed and comminuted bone are readily understood and accepted. In the absence of a dural tear, the dura should be opened without fail because of the high incidence of subdural and intracerebral lesions in association with compound depressed fractures. In penetrating wounds the debridement of a dual tear is essential, and it should be extended by curvilinear incision.

In focusing our attention on the brain wound proper, preoperative stereoscopic radiographs permit realization of the extent of the missile track whenever there are retained foreign bodies. They also permit anticipation of involvement of dural sinuses. Preoperative radiographs are indispensable for the localization of indriven bone and metallic fragments. While pulp and clots exuding from the track under pressure can be evacuated by suction, the devitalized cortical strip, surrounding the track of entrance, deliberately should be resected. Liquefied brain tissue, clots and foreign bodies must then be removed from the depth of the track. Debridement can be considered complete if the track remains open. A closing track virtually is a infallible sign of residual disease requiring surgical attention.[3] Retained bone fragments or hematomas adjacent to the missile track show themselves by narrowing or closing the track within minutes after evacuation of its contents.

Primary definitive surgery of penetrating wounds of the brain includes the removal of all bone fragments inasmuch as their retention leads almost invariably to infec-

tion. There always will be instances in which even the most experienced surgeon will miss a single fragment which can be detected by routine postoperative radiographs. Secondary surgery, removing the retained, devitalized piece of bone, should be done in such cases without fail and without delay. Though the patient may be asymptomatic or may have a well defined neurologic deficit, secondary surgery need not carry any undue risk nor need it add to the existing deficit. The strenuousness of the attempt at secondary removal of a bone fragment depends on its location and accessibility. Such an operation becomes hazardous if the fragment should have wandered and embedded itself in deep structures of the brain. Situations are readily conceivable in which it will be safer to accept the potential of late infection and forego secondary surgery.[4]

While a somewhat more liberal attitude toward retention of metallic fragments may be permissible, the old tenet of absolute sterility of a metallic fragment does not hold. More often than not, metallic fragments carry other foreign material with them and are a potential source of infection for years to come. For that reason, and because of the irritative phenomena which metallic fragments may cause, they should be removed whenever feasible.

Watertight dural closure is essential. A small dural defect may result in cortical herniation. Primary suturing of the dura, or closure by graft, serves to minimize the extent of corticodural scarring thus facilitating subsequent cranioplasty. The most valid argument in favor of watertight dural closure, primarily or by graft, is the barrier which this forms against the centripetal spread of subcutaneous infection.

Primary layer closure of the scalp without tension is the essential final operative step. Mobilization of the scalp will suffice in many instances to effect closure without tension. In the presence of extensive scalp loss, immediate plastic repair may become necessary.

The surgical measures which have been discussed apply to all penetrating brain wounds. Certain special wounds require added specific measures.

Transventricular Wounds

In such wounds metallic foreign bodies may lodge within the confines of a ventricle. Their removal is essential because of the damage they may do by wandering.[5,6] Comminuted bone fragments may become entangled in the choroid plexus requiring its resection and coagulation. These wounds present a major problem because of excess fluid not being able to reach an absorbing surface. Pseudoporencephalic cysts may form, increasing the permanent neurologic deficit. Noncommunicating hydrocephalus is an infrequent, but nevertheless potential, complication. Initial employment of a ventriculo-atrial shunt in wounds with extensive laceration of a ventricle should be considered. It is conceivable that the high mortality attendant upon these wounds can be reduced and the postoperative management be simplified by initial shunting.

Through and Through Wounds

These require a diligent search for both entrance and exit wounds.[7] Failure to recognize one or the other may lead to delayed treatment with an attendant increased incidence of infection. Positioning, when feasible, should allow access to both the entrance and exit wounds from the same operative field. This can be accomplished in most instances with the patient in the supine or lateral recumbent position. There is a special need for meticulous resection of the track because most of these wounds are caused by high velocity missiles. Adjacent to such tracks, there is a somewhat wider zone of contusion and the potential for secondary necrosis and liquefaction is great. If the missile has traversed the falx, the penertation may be enlarged to allow inspection of the contralateral track. When "transfalx" cleansing is not possible, visualization to the falx from both wounds is desirable. Through and through irrigation of the track is feasible and valuable whenever both entrance and exit wounds are approached through one surgical field.

Dural Sinus Wounds

Of the essence in the management of these wounds is repair of the torn dural sinus without embarrassment of venous blood flow.[8,9] Small lacerations can be closed

by direct suture or by suture over gelfoam. The vast majority of these wounds requires repair by a large muscle stamp which can be fed into the lumen of the sinus. A thrombus at site of sinus laceration requires removal prior to insertion of the muscle stamp. Swelling of the brain, a consistent sequela of a dural sinus wound, can be combatted by corticosteroids.

Tangential Wounds of Scalp and Skull

In such a wound the missile does not pentrate the skull, but merely glances or grazes it.[10] The scalp is lacerated and the skull may or may not be fractured. Regardless of the extent of damage to the skull, contusion of the underlying brain is common. Epidural, subdural and especially subcortical hematomas have been encountered frequently in tangential wounds. The principal error committed in the management of tangential scalp wounds is an underestimation of their seriousness, since beneath a seemingly simple scalp laceration there may be considerable disruption of cerebral tissue.

Facio-Orbito-Cranial Wounds

Here the missile enters usually through a small infraorbital perforation, reaching the intracranial cavity by penetration of the base of the anterior or middle fossa. Rhinorrhea is a common occurrence. These wounds are characterized by a high incidence of subdural and intracerebral hematoma formation. In the typical facio-orbito-temporal wound, the sphenoid wing is comminuted, the inferior temporal lobe destroyed and the middle fossa filled with liquefied brain tissue, hematoma and comminuted bone fragments.

To ward off a fatal outcome from compression of the midbrain and brain stem, and to prevent infection, these wounds require a high surgical priority. The surgical approach consists of craniotomy rather than craniectomy. Usually the dura overlying the base of anterior or middle fossa is torn extensively and will have to be repaired by intradural graft.

The vast majority of these wounds result in destruction of one eye. Because of the outward obscurity of concomitant cerebral damage, facio-orbito-cranial wounds may not always come to neurosurgical attention immediately. They are well represented among ignored or unrecognized penetrating brain wounds, resulting in meningitis, cerebritis or brain abscess.

Facio-orbito-frontal and facio-orbito-temporal wounds have received scant attention in the past. There is only one paper in the literature analyzing these wounds in detail on the basis of World War II experiences.[11] Among 1,345 consecutive Korean War casualties, there was a 6% incidence of facio-orbito-cranial wounds.

Discussion

In concluding these brief notes on penetrating craniocerebral trauma, it may be worthwhile to recall the recommendations which were made at the Head Injury Conference, held at the University of Chicago Center for Continuing Education in February of 1966.[12] These recommendations included the establishment of specialized Head Injury Centers in conjunction with hospitals with large accident services, permitting prospective studies to develop data concerning the mode of injury, clinical states, treatment, and acute and chronic convalescence, also providing opportunity for training general surgeons, neurologists, practitioners, and paramedical personnel in emergency care of head injuries.

Strategically placed centers, receiving their patients by air from a designated perimeter, would add greatly to the treatment of patients with head injury as incurred in civilian life, and in the event of mass casualties. Such centers would achieve the ultimate objective which Major Straub so lucidly defined sixty years ago—". . . to bring the patient, the facilities for his treatment, and the surgeon in conjunction under the most favorable circumstances."

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The family physician commonly must advise in regard to the child who has a disability or handicap in learning to read. This review may be helpful in identifying the problem.

Reading Retardation: The Physician's Role*

JOHN L. MONTGOMERY, JR., MD., Knoxville, Tenn.

Introduction

We all know that frequently used and also accurate cliché, "The man who reads is the one who gets ahead." For 20 or 30% of the children in our public schools, the chances for getting ahead would seem rather limited at best because they have a form of reading disability.

It is the purpose of this paper to briefly define and emphasize the problem of reading retardation, and to suggest a rational and practical approach in the recognition, understanding and management of it by the physician. Special emphasis is placed on the role of the physician in a cross disciplinary approach to the diagnosis and treatment of reading retardation.

Terminology

I believe the terms "reading retardation" or "reading disability" are the most acceptable in discussing the overall problem. As a working definition, reading retardation will refer to a significant discrepancy between the actual reading level, which is based on standardized reading test scores which are given at the school, and the expected normal "reading level" for the age of the child from regional or local averages. Some workers in the field might consider a child retarded with a year, or perhaps two, lag in his reading development. As we will see later, the elucidation of the problem of reading retardation involves the consideration of varied and diverse factors.

The much misused term "dyslexia" will be utilized in a restricted sense because, as will be pointed out later, this disorder is responsible for only a small proportion of reading disability.

Therefore it would appear confusing to apply a specialized term as "dyslexia" to refer to the whole problem of reading retardation. Dyslexia may be defined as "difficulty in reading meaningfully due to a central lesion." Some prefer the term "primary developmental dyslexia" when discussing reading difficulties thought to be genetically determined and constitutional. It is suggested for our purposes that all other reading retardations be termed "secondary." These reading retardations are the result of a variety of complications. The classification proposed below will encompass only these two groups. In other words, we are suggesting only two categories of reading retardation; a neurologic syndrome, primary developmental dyslexia due to a central lesion of some sort; and, a group with secondary reading retardation which encompasses other known causes. These are described below.

Classification of Reading Retardation (Disabilities)

A. *Primary Developmental Dyslexia* (Dyslexia): A difficulty in reading meaningfully due to a central lesion, resulting in a genetically determined constitutional disorder occurring three or four times more frequently in boys than girls with normal (verbal) intelligence.

B. *Secondary Reading Retardations*: This group includes the retarded readers for which some possible contributing cause can be discovered and information gathered by a thorough "workup" (educational, psychologic and medical). The following list of causes is *not* in order of relative importance or frequency, nor is it suggested that the list covers all the possible causes.

(1) Poor instruction, improper teaching methods is one of the most important causes.
(2) "Late bloomer," i.e., slow maturer.
(3) Poor motivation (or lack of opportunity).
   a. Cultural deprivation (lack of family stability).
   b. Ghetto or racial restrictions.
   c. Socio-economic.
(4) Intelligence—low intellectual functioning.

*Read at the meeting of the Tennessee Academy of Ophthalmology and Otolaryngology, April 11, 1969, Gatlinburg, Tenn.

(5) Emotional maladjustment or maldevelopment, i.e.:
   a. Short attention span.
   b. Disciplinary problems.
   c. Psychiatric disorder.
(6) Organic brain damage:
   a. A neurologic lesion that would include along with other manifestation of neurologic disease evidence of reading retardations, e.g., cerebral palsy.
   b. Seizure states.
   c. Birth trauma.
(7) Secondary to poor health and development, e.g.:
   a. Anemia.
   b. "Failure to thrive."
   c. Chronic infections (tuberculosis, brucella, syphilis, etc.).
   d. Endocrinologic problems, e.g., hypothyroidism, diabetes, Addison's, etc., (about anything that comes to mind could have some possible effect on ability to perform).
(8) Poor Hearing.
(9) Poor visual functions (visual handicaps), e.g.:
   a. Visual acuity (near, far-sighted or astigmatism, etc., i.e., some refractive error).
   b. Muscle imbalance.
   c. Medical or surgical problem.
   d. Does not include "central perceptual problems." This is an educational problem for experts in this field.

Diagnosis

Study of the Child with a Reading Disorder

It is axiomatic that accurate and correct diagnosis is a vital prerequisite for selection of the proper treatment. We know from our medical background that only when all the diagnostic possibilities are considered can the proper conclusion be reached. Therefore, only when the physician, with his broad knowledge of the functioning and abnormalities of the human organism, is included on the "team" can there be a rational approach to the diagnosis of reading retardations. The physician is acting as a prime consultant to the educator who has the primary responsibility for identifying these children.

The physician must take a leading role in assisting the educator in the proper diagnosis and treatment of children with reading retardation. If he does not, other "practitioners" will come into this field as "experts" and consultants to the educator who must rely on their judgment and diagnosis from only a paramedical viewpoint. In many communities the leading "experts" in this field are not medical personnel and have absolutely no background in a field that deals in a variety of medical problems. Often, children and their parents are misled and a great deal of time and money is expended for useless therapy, when perhaps a more proper approach could have been made with medical leadership. When I speak of medical leadership I do not imply that the ophthalmic consultant is the leader in the medical "workup" of the child.

I feel strongly that the "workup" should be the responsibility of the family physician or pediatrician. He has the great advantage of a much broader background and knowledge of the child, and is in a better position to make judgments about the many factors outlined above.

The following is suggested as a guide in the "workup":

(A.) *The initial examination.* By far the most important step in the study of the child with reading retardation is the thorough clinical evaluation of the child by his personal physician. Many of the factors outlined above as secondary reading retardation can be tentatively ruled out. Examples might be:—the slowly maturing child with a lack of opportunity; organic brain damage may become apparent on initial examination, and poor hearing or visual functioning also may be discovered in the course of the office examination. Of course, the clinical examination cannot completely rule out all of the above factors, and unless some definite abnormality is turned up, the following referrals might become necessary.

(B.) *The eye examination.* Many visual functions are evaluated during the eye examination including visual acuity, cycloplegic refraction, and function of the extraocular muscles. Tests of hand and eye dominance, abilities of lateralization, color discrimination, and central perceptual abnormalities might be included in the ophthalmic workup. However, some feel that the measurement of perceptual functions is in the bailiwick of the psychologist who has been trained in great depth

to evaluate perceptual and intellectual functions with a broad battery of tests. A thorough evaluation of the morphology of the eye also is done in every case, and other tests such as visual fields, orthoptic evaluation, and special examinations are done in selected cases.

(C.) *The psychology referral.* The clinical psychologist is one of the most valued consultants in the proper "workup" of a child with reading retardation. Many local areas have access to publicly supported psychology clinics, or a private psychologist, of course, may be used. Only licensed psychologists can properly administer and interpret the appropriate psychometric tests. On recalling the definition of primary developmental dyslexia, we note that it occurs only in children with normal *verbal* intelligence. This can only be determined by properly administered psychometric tests which measure various phases of a child's intellectual functioning. Occasionally, organic disease of the brain can be detected with the aid of psychologic tests. Measurements of gross and fine motor functioning is also a part of the psychologic evaluation if not done in the school system.

(D.) *Psychiatric referral.* Frequently it becomes apparent in the initial evaluation that a psychiatric referral may be indicated. In other cases the need for psychiatric referral may not become evident until the psychologist completes his testing. Severe emotional problems or maladjustments are a frequently unrecognized and often treatable cause of reading retardation.

(E.) *Audiometry.* This naturally is indicated with any suggestion of poor hearing. A surprising number of children have not learned to read simply because of poor hearing.

(F.) *Neurologic evaluation.* If organic brain disease is a possibility a thorough evaluation by a neurologist or a neurosurgeon is indicated. This may include an electroencephalographic evaluation or other neurologic (surgical) studies as the indication arises.

(G.) *Reading clinics.* Most universities and teacher's colleges have associated reading clinics in which the reading disabilities are diagnosed and treated by highly trained and specialized personnel. If funds permit, clinical psychologists are included on the staffs of these institutes. These experts will receive referrals from local school systems, physicians and psychologists, to diagnose and prescribe courses of remediation. In some of the larger school systems these clinics are included within this framework.

Treatment

The treatment of primary developmental dyslexia is primarily an educational responsibility. The treatment of secondary retardation may fall in any number of categories and would be suggested by the proper diagnosis, and would frequently become the physician's responsibility.

Summary

I believe that our primary responsibilities as physicians and as members of the multidisciplinary team, are the following:

(1.) Initial complete and thorough medical evaluation of the child.

(2.) The proper referrals to consultants as indicated by the initial impressions from the clinical study, to assist in reaching the correct diagnosis.

(3.) Knowledge of the community resources (psychologist, reading clinics, etc.)

(4.) Referring children for proper treatment. This field is wide open for quacks and charlatans against which one must be on guard. However, we should always keep an open mind about any legitimate treatment.

(5.) As physicians in our communities we must be active and outspoken advocates for obtaining the proper personnel and facilities in our area for the diagnosis and treatment of this very important disorder. As is so often the case, it is those who need the proper diagnosis and therapy the most, that can afford it the least. We must keep

in mind that the earlier we are able to diagnose and treat reading disabilities, the better the prognosis. The problem of the magnitude of reading retardation, that touches so heavily on medicine, *demands* our attention not only as physicians, but as good citizens. "We are physicians. There is no aspect of health, direct or remote, that is not our responsibility, in whole or in part." (Gerald D. Dorman, M.D., President AMA, 1969.)

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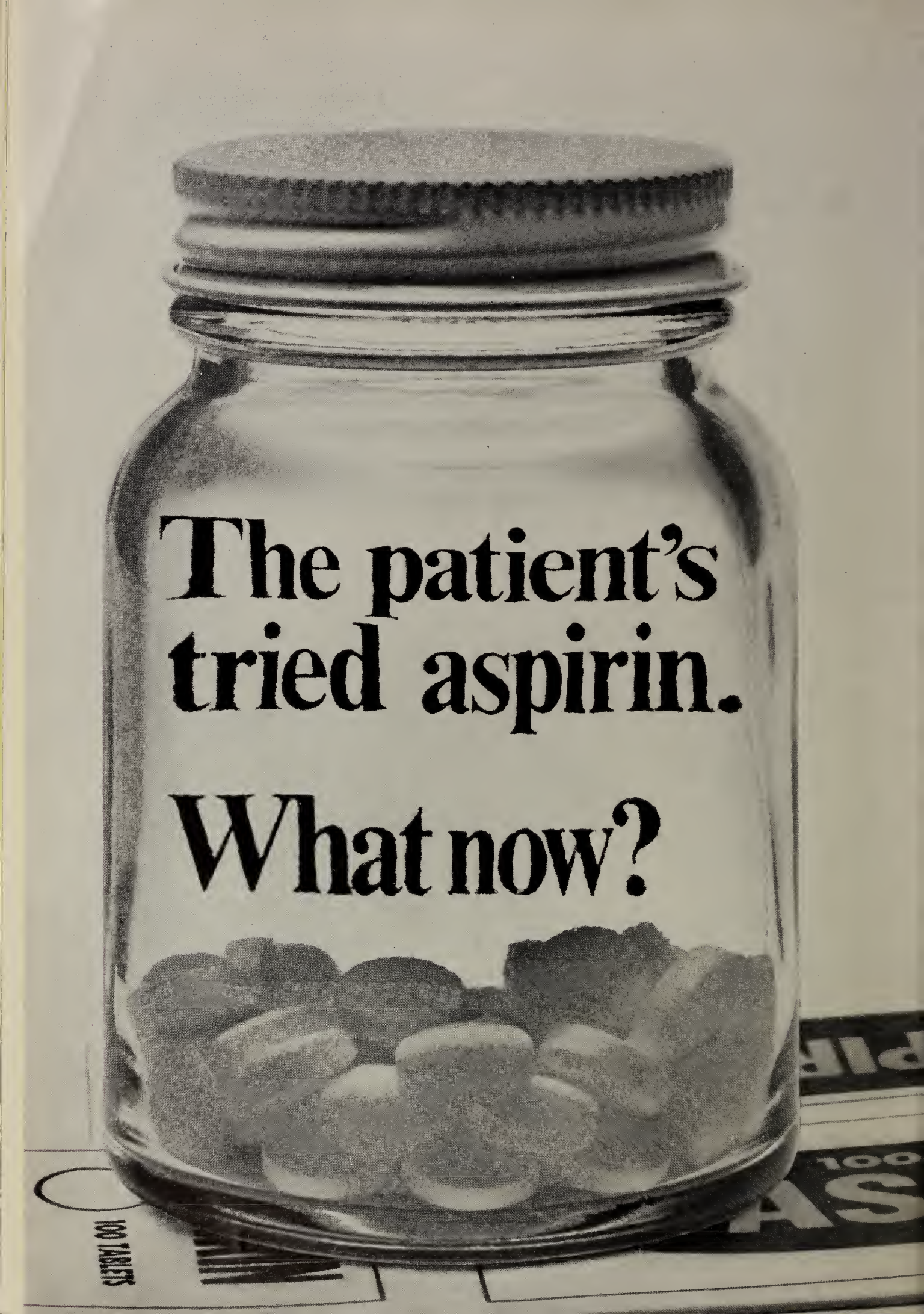
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From the Executive Director
E. Ballentine

TMA MEDICAL DIGEST

News of Interest to Doctors in Tennessee

TMA TRUSTEES STRIVE TO IMPROVE MEDICAID PAYMENTS TO MDs . . . TMA Officers and representatives continue to meet with State officials in an effort to obtain a more realistic payment for physician charges under the Medicaid program . . . TMA's Board of Trustees stand fast on the premise that Medicaid is a health care program and payment to physicians should be made on usual and customary charges . . . TMA officers and other representatives have recently met with members of the Public Health Council in an effort to reach an understanding with the State of Tennessee on a more realistic reimbursement plan for physician providers. With physicians' fees fixed at the present 50% of usual and customary, the level of physician participation may not be sufficient to allow state agencies to compile statistical data accurate enough to be the basis for reliable fiscal projections . . . If the objective of the law is to be reached, and indigent patients of the state are to have their care financed in private offices and other private facilities by public funds, TMA spokesmen believe sufficient funds must be made available by the General Assembly to support the program. Clerical procedures must be made as simple as possible and physicians must be consulted (through their appropriate representative committees) when policy decisions affecting physicians are made.

* * * * *

TIME FOR COUNTY SOCIETY ELECTION OF OFFICERS AND DELEGATES . . . Secretaries of all county medical societies have recently received information and appropriate forms for use in following the provisions contained in the TMA By-Laws, to elect their officers and TMA delegates and report the names of those elected to the Tennessee Medical Association by January 1, 1970 . . . It is urged that all societies conduct their elections before the end of December . . . The names of delegates are needed in order that a Nominating Committee can be appointed by the Board of Trustees and the names of committee members can be sent to all county medical societies.

* * * * *

DISTINGUISHED SERVICE AWARDS AND NOMINATIONS ARE REQUESTED . . . The Board of Trustees has established a maximum of three "Distinguished Service Awards" to be made to physician members each year upon receipt of such nominations from the county societies, or from any member of TMA. The awards are made at the annual meeting next April. In submitting a candidate, the following criteria should be followed: (1) Any TMA member in good standing is eligible for nomination, and any member in good standing may nominate a recipient for the award. (2) Nominations for the award will be evaluated by the Board of Trustees. Factual data supporting the candidate should be filed with the Executive Director of TMA not later than January 1, 1970. The data should provide: (a) biographical information on the nominee, including a recent biography; (b) medical education and training of nominee; (c) professional history, including private practice, specialty training, contributions to medical literature, teaching affiliations, staff connections, etc.; (d) detailed description of a specific or general contribution or accomplishment of

the nominee to the advancement of medical science or any of the phases upon which the nominee is to be made; and (e) substantiating evidence of merit, including printed materials, publications, articles, and other citations. (3) All nominees for the Distinguished Service Awards will be evaluated with not more than three being selected in any year. (4) It is planned to make the presentation during the first session of the House of Delegates at its meeting next April 8.

* * * * *

MORE HARASSMENT FOR PHYSICIANS . . . Recent actions of the Senate Finance Committee in executive session, mean that physicians will be faced with additional harassment and expense . . . The Committee approved an amendment which will be added to the 1969 Tax Reform Act to require that payments made under Medicare and Medicaid programs and payments made by private medical insurance carriers must be reported to the Federal Tax Collector if they aggregate $600 or more during the year . . . This amendment will require that the Department of HEW record transactions with respect to these programs on the basis of the individual's social security number. The payments which must be reported include those made directly to the health care practitioner who accepts an assignment from his patient and those for which a patient submits bills and is paid for services rendered by the health care practitioner. The amendment also requires that the Secretary of HEW submit an annual report to the Finance Committee and to the House Ways and Means Commmittee, identifying each person paying or paid a total of $25,000 or more under Medicare or Medicaid.

* * * * *

SENATE RAPS MD CORPORATIONS . . . During the last few weeks, the Senate Finance Committee has also been in executive session considering H.R. 13270, the House passed Tax Reform Act of 1969 . . . The Committee has recently agreed on two provisions which are of particular interest to medicine . . . The committee advised that professional service associations would be limited in the amount of pension that any individual in the professional association (or corporation) would be limited to the contributions provided under the "Keogh Formula" which permits an individual to contribution 10% of net earnings or $2,500, whichever is less, to be set aside tax free each year for pension purposes . . . The Committee also announced that they had adopted the House language as it relates to the taxation of unrelated business income of tax exempt organizations. Any income derived by a tax exempt organization which is not directly related to its tax exemption function would be subject to taxation as unrelated business income. Affected by this would be your State Medical Journal and all other professional journals which accept advertising.

* * * * *

MEDICARE . . . Medicare patients must be, effective January 1, certified as requiring hospital care on the 12th and 18th days of hospitalization, rather than the 14th and 21st days. The move is intended to reduce long hospital stays, HEW reports . . . Bigger hospital bills will face Medicare patients in 1970 . . . New deductible for first 60 days of in-hospital care will be $52, up $8. Per diem deductible for the 61st to 90th day goes to $13, up from $11.

* * * * *

WHO SAID ADVICE IS CHEAP? . . . U.S. Department of Health, Education, and Welfare has 386 advisory committees consisting of 5,308 persons, such "advice" costing $7,093,290.00 this year. For fiscal 1971, according to HEW Secretary Finch, who blamed physicians for the high cost of Medicaid, 407 committees, totaling 5,514 persons, are expected to advise HEW at a cost of $7,225,487.00.

Public Service

Communications Legislation

Hadley Williams, Public Service Director

AMA SUBMITS UNIVERSAL HEALTH INSURANCE PLAN TO CONGRESS . . . Dr. Russell B. Roth, speaker of the AMA's House of Delegates and a practicing physician in Erie, Pennsylvania urged the House Ways and Means Committee to consider adoption of the AMA's voluntary national health insurance plan, which it has dubbed "Medicredit". The program would in effect allow a person's Federal tax liability to act as an index as to what share of the cost of his health insurance premium would be borne by the Federal Government and how much would be paid by the individual. The plan would utilize a system of Federal income tax credits to those individuals and families who purchase qualified health coverage from approved private insurance companies or plans. Medicredit would not affect the present Medicare program for those 65 and older but would replace Medicaid. For those individuals and families who, in terms of their tax liability, are in the bottom 30 per cent of taxpayers, health insurance protection would be provided without cost to them. They would, Dr. Roth said, simply receive a certificate entitling them to free health insurance. They, in turn, would submit the certificate to a qualified company or plan. The private insuror who issues a comprehensive plan covering both hospital care and physician's services would then be reimbursed directly by the Federal Government. As an individual or family's tax liability level rose, the Federal Government would assume a smaller proportionate share of the cost of health insurance. Federal tax credit would be subtracted from the amount of income tax owed the Federal Government in a given year. Basic medical benefits of AMA's "Medicredit" plan would include: 60 days of inpatient hospitalization; emergency room and outpatient hospital services; and all physician's services whether performed in the hospital, home, office or elsewhere. Supplemental benefits to basic coverage would also be eligible for tax credit. In his testimony, Dr. Roth stressed the importance of utilizing private insurance carriers, thus taking maximum advantage of private sector competition to help hold costs down.

* * * * *

TENNESSEE MEDICAL ASSISTANT GETS NATIONAL POST . . . Mrs. Joan Hutchens of Winchester was elected to a three-year term on the Board of Trustees of the American Association of Medical Assistants at the organization's meeting in Honolulu recently. Mrs. Hutchens is immediate past-President of the Medical Assistants Society of Tennessee and currently serves on the public relations and professional advancement committees of the National group. More than 1,000 attended the Annual Convention in Hawaii and the Medical Assistants heard Dr. Christiaan N. Barnard discuss "Medical and Ethical Aspects of Human-to-Human Heart Transplantation" and AMA President, Dr. Gerald Dorman talk on "Promise of the Future."

MD REPRESENTATION ON HOSPITAL BOARDS . . . A survey recently conducted by the Tennessee Hospital Association shows that 64% of the hospitals responding had physical representation on their governing board. A total of 118 hospitals were questioned and 76 indicated MD board members. Also revealed was the fact that 14 hospitals had added MD's as Trustees during the past twelve months. The survey also pointed out that 61 hospitals utilized Joint Conference Committees of their medical staffs and Boards of Trust. The Joint Conference Committee concept has been recommended by the Tennessee Hospital Association as a means of complying with standards for hospital accreditation established by the Joint Commission on Accreditation which require a formal means of liaison between medical staffs and Boards of Trust. THA recommends that a Joint Conference Committee be a part of the organizational structure of every hospital and that it should exist even where there is medical staff representation on the governing board. TMA policy established by the House of Delegates calls for MD's to be represented as voting members on hospital governing boards. The results of THA's survey was made available at a recent meeting of the TMA-THA Joint Liaison Committee. TMA members of the Liaison Committee are: Dr. A. Roy Tyrer, Jr. of Memphis, chairman of the TMA Hospital Committee and Drs. George Smith of Winchester, George Mayfield of Columbia and Charles Cox of Jackson. The committee meets on a quarterly basis to discuss mutual problems.

* * * * *

SHOULD YOU FORM A MEDICAL CORPORATION? . . . That is the title of a new publication available free from the AMA. The subject is one of increasing importance to many physicians. Write Corporate Law Department, American Medical Association, 535 N. Dearborn Street, Chicago, Illinois 60610.

* * * * *

MEMPHIS RMP RECEIVES GRANT APPROPRIATIONS . . . The Memphis Regional Medical Program has approved four new projects with budgets totaling more than $600,000. Also announced was a continuation grant of $570,000 for central administration of MRMP for another year. The four new projects include: a Memphis-based disease prevention program designed to test some 20,000 patients per year; a similar "screening" program to be conducted in five North Mississippi counties utilizing a mobile health trailer; expansion of an existing network of heart clinics across the Northern tier of counties in Mississippi as part of a statewide program already being conducted; and a pilot study to investigate the incidence and prevalence of hospital-acquired infections to be conducted in the City of Memphis hospitals. A total of 11 other projects are currently being conducted under the program and sponsorship of the University of Tennessee College of Medicine.

* * * * *

CHIROPRACTORS BUSY IN CONGRESS TOO . . . Despite the fact that a special HEW report to Congress recommends exclusion of chiropractic services under Medicare, the names of 61 Congressmen appear on 57 House and 2 Senate bills which would authorize inclusion of such services under the program.

President's Page



Francis H. Cole

A cumbersome mechanism of committee structure has developed under the system of Utilization Committees, Mediation Committees, and Review Committees. Originally, Mediation Committees (then called Grievance Committees) served to review questions regarding fees and services between individual patients and their doctors, and occasionally between physicians in dispute over ethical matters. Later, as third party involvement increased, Review Committees were added to mediate claims between insurance carriers and physicians when the patient had no interest in the financial aspects of his medical care.

With the onset of Medicare, Utilization Committees were required to oversee hospitalization to determine when Medicare liability for hospital benefits ended, and to assist physicians in persuading the occasional reluctant patient to leave the hospital at the proper time. Utilization Committees were primarily hospital based, but an appeal to County Medical Society and to State levels was provided.

However no clear-cut method of operation was devised, these overlapping jurisdictions resulted in interminable delays, and the few cases of over-utilization brought to the attention of Tennessee Medical Association have been bounced from committee to committee and action on these claims has not yet been completed.

The Council of Tennessee Medical Association has eventually been called upon to repeat hearings, to review material, and to rule on the merits of each case on an ethical basis. Over-charging is unethical, over-servicing is unethical, over-treating is unethical, overuse of hospital or nursing homes is unethical. Untilization and Review Committees must move out of hospitals, must have dedicated members to defend their colleagues against capricious allegations, but must at the same time protect our profession and our patients from a minuscule minority of physicians who, by their unethical conduct will bring discredit to all of us.

Sincerely,

Francis H. Cole M.D.

President

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DECEMBER, 1969

EDITORIAL

AGE AT MENARCHE

Clinicians are often asked by concerned parents whether their daughter's age at menarche is abnormally late—or abnormally early. In answer, it may be said that what is normal for a particular girl depends not only upon her genes and life history but also upon the common characteristic of human females to menstruate at sometime during the second decade of life.

For each species of mammal, a characteristic period elapses between birth and development of full sexual function. In normal girls evidence of sexual maturation appears sometime between eight and twelve years of age. At that time, most healthy girls begin to have physical manifestations of the changes in ovarian function that are associated with reproductive maturity. Their breasts start to bud, and hair appears in the pubic and axillary regions. Within a year, the first episode of menstrual bleeding occurs, providing clear evidence that the ovary is now capable of secreting significant quantities of steroid hormones. Sometime, thereafter, the brain begins to emit cyclic neroendocrine signals at intervals of approximately 29 days; these signals cause the pituitary gland to release the hormones responsible for ovulation, and the reproductive capability of the woman is established.

Very little is known about the mechanisms that prime the pump or set the cycle in motion. Variations in the rate of sexual development in the female have been reviewed by Zacharias and Wurtman[1] and many factors undoubtedly play a significant role in determining the age of menarche. Unfortunately it is impossible to effectively separate the effects of various factors which can conceivably alter the onset of menarche. The ability of environmental and social influences to over-ride genetic influences is well illustrated by the studies of Ito[2] showing that Japanese girls born and reared in California reach menarche more than a year and a half earlier than those born in California and reared in Japan or those born and reared in Japan.

There is no supporting evidence for the widely held belief that sexual development occurs at an earlier age in the tropics than in temperate zones. In fact, studies would seem to indicate that temperature, humidity, altitude and season of themselves do not alter the onset of sexual maturity.

Socioeconomic factors are probably quite important with nutrition and affluence both playing important roles. Early in the 17th Century Quarinonius in Austria stated "The peasant girls of this landschaft in general menstruate much later than the daughters of the townsfolk or the aristocracy, and seldom before their seventeenth, eighteenth or even twentieth year. . . . The townsfolk have usually borne several children before the peasant girls have yet menstruated. The cause seems to be that inhabitants of the town consume more fat food and drink and so their bodies become soft, weak and fat and come early to menstruation. . . ." Present workers confirm his observations regarding body build and Tanner states ". . . in countries where nutrition may be more than adequate, fatness and early ma-

turing go together. Linear people, both men and women, develop later."

There is some correlation between the age of onset of menarche in mothers and daughters and also between sisters. However, even in these situations the socio-economic factors may be more important than the genetic.

Although there is considerable evidence that in Western Europe and the United States, there has been an acceleration of sexual development during the past 100 years, this has not been universal since in some areas acceleration has not occurred. Again, socio-economic factors including nutrition may be responsible for the earlier age noted in many highly developed areas.

Diseases also seem to influence the age of menarche. Menstruation appears earlier in diabetic women than in non-diabetic women in some studies. Obesity, if not more than 30 per cent over maximum expected weight for their height and somatotype accelerates the onset of menarche. If the obesity is excessive, however, menarche is delayed. Finally blindness seems to accelerate the onset of menses when blind and non-blind girls are compared.

The unknown influences outnumber the known influences which affect the age of menarche. Although the age of onset of menstruation is influenced by family heredity, body build, etc., Zacharias and Wurtman suggest that it is more susceptible to modification by certain socioeconomic influences (such as nutrition and urban vs. rural living) and by specific disorders (for example, diabetes, obesity and blindness.)

A.B.S.

1. Zacharias, L. and Wurtman, R. J.: Age at Menarche: Genetic and Environmental Influences. New Eng. J. Med. 280: 868-875, 1969.

2. Ito, P. K.: Comparative Biometrical Study of Physique of Japanese Women Born and Reared Under Different Environments. Human Biol. 14:279-351, 1942.

IN MEMORIAM

Cole, Aaron, Piney Flats. Died September 27, 1969, Age 83. Graduate of Lincoln Memorial University, 1916. Member of Washington-Carter-Unicoi County Medical Society.

PROGRAMS AND NEWS OF MEDICAL SOCIETIES



New Members

The Journal takes the opportunity to welcome these new Tennessee Medical Association Members.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY
William Clayton Patton, M.D., Chattanooga
Millard Wray Ramsey, M.D., Chattanooga

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE
James Barker, M.D., Jackson

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY
Irma Stewart Kennedy, M.D., Cordova
Richard B. Raines, M.D., Memphis
Edward E. Velayos, M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE
Helen C. Burks, M.D., Madison
Gerald M. Fenichel, M.D., Nashville
Michael E. Glasscock, M.D., Nashville
Roger K. White, M.D., Nashville

Nashville Academy of Medicine Davidson County Medical Society

Dr. Mary Calderone, Executive Director of the Sex Information and Education Council of the United States (SIECUS), was the feature speaker at the November 11 dinner meeting of the Nashville Academy of Medicine. The Academy also co-sponsored, along with the executive boards of the Metro-Nashville Education Association and the Council of Parent Teachers Association, a lecture by Dr. Calderone to representatives of educational groups, PTA's, local governmental units, and interested agencies in the community at an earlier meeting that day.

★

The Nashville Academy of Medicine also co-sponsored, along with the Tennessee Division of the American Cancer Society, Senior Citizens, Inc., the Department of

Public Health, and the Tennessee Medical Association, a breast cancer detection clinic on October 16. The screening clinic was held at the Senior Citizen's Center in Nashville and proved to be an eminent success. 361 women were examined by 31 Academy volunteers and 25 abnormalities were found. The patients with abnormalities were referred to their personal physicians.

Dr. Benjamin F. Byrd, Jr., along with representatives from the sponsoring organizations, organized and implemented the pilot project which was designed to be the prototype of similar such projects throughout the state.

Knoxville Academy of Medicine

At its November meeting, the Academy heard a panel discussion on the subject "The Crisis in the Emergency Room." Participating in the program was Dr. James Prose, Dr. Harwell Dabbs, Dr. William Keeling, Dr. Robert Lash, Dr. Dennis Coughlin, Dr. A. L. Jenkins, and Mr. Bobby Meador, Assistant Administrator of East Tennessee Baptist Hospital. The program was sponsored by the Academy's Committee on Emergency Medical Care.

Roane-Anderson County Medical Society

The October meeting of the Roane-Anderson County Medical Society was held at the Oak Ridge Hospital. A movie entitled "Aldosteronism—The Story of a Hormone" was shown and Dr. James E. Pittman, Jr., Director of the Division of Endocrinology and Metabolism at the University of Alabama Medical Center, was the feature speaker for the dinner meeting.

Memphis-Shelby County Medical Society

The Memphis and Shelby County Medical Society met in regular session at the auditorium of the Institute of Pathology, University of Tennessee on November 4. The feature of the scientific program was a panel discussion on "Medical Malpractice Screening Code" by the Medical-Legal Committees of the Memphis and Shelby County Medical Society and the Memphis and Shelby County Bar Association.

NATIONAL NEWS

The Month In Washington
(From Washington Office, AMA)

An American Medical Association spokesman outlined the AMA's voluntary national health insurance plan, "Medicredit," for consideration by the House Ways and Means Committee. Dr. Russell B. Roth, speaker of the AMA's House of Delegates and a practicing physician in Erie, Pa., said the plan, which would be financed in part by federal income tax credits, is flexible and would assure all Americans—no matter how limited their financial resources—of adequate health care protection.

"Representing this country's physicians as we do," Dr. Roth said, "the AMA is on record in its belief that it is the basic right of every citizen to have available to him good health care. Today we want to put before this committee a plan which is universal in scope, voluntary in nature, and realistic in terms of total program cost."

He estimated the program would cost the federal government $8 billion to $9 billion a year, but about $3 billion a year of that would be offset by liquidation of the medicaid program. Medicare would continue.

"For those in low-income categories, this protection is theirs without expense or contribution on their part," Dr. Roth. "For those with moderate and higher levels of income, Medicredit provides a system of cash incentives to enable them to protect themselves against major health care costs. Our proposal is the result of years of careful study of our existing mechanisms for delivering and financing health care, coupled with our close study of the federal government's ability to fund a universal health insurance program.

"It would give to persons who have purchased comprehensive health insurance the option of receiving a tax credit on their annual federal income tax return, a credit based on their tax liability. That is, a taxpayer could take as a credit against the amount of income tax owed to the federal government, all or part of their personal cost for comprehensive health coverage. Persons or families with a lower tax lia-

bility (usually reflecting lower income or more dependents and allowable expenses) would receive a greater tax credit. And those families in the lower 30% income range, would, without cost to them, receive a certificate enabling them to purchase health coverage from qualified groups or plans."

The AMA plan calls for establishment of a "Health Insurance Advisory Board" to create Medicredit guidelines. It would be chaired by the Secretary of Health, Education, and Welfare and include the Commissioner of Internal Revenue and public members. It would review the effectiveness of the program and file annual reports with the President and the Congress.

Basic medical benefits of Medicredit would include:

—Up to 60 days of inpatient hospital services, including maternity services;

—All emergency room and outpatient services provided in the hospital;

—All physicians' servcies, whether performed in the hospital, home, office or elsewhere.

Supplemental benefits to basic coverage would also be eligible for tax credits.

Dr. Roth stressed the importance of utilizing private insurance carriers, this taking maximum advantage of private sector competition to help hold costs down.

Rep. Durward G. Hall, M.D. (R., Mo.), a former member of the AMA House of Delegates submitted to the committee another national health insurance plan. The first part of his two-part plan calls for the federal government to furnish persons eligible for medicaid with health insurance certificates covering certain specified basic health protection. The states would have the responsibility for the balance of health care for an eligible individual after his basic coverage had been exhausted. Thus, the Hall plan would replace medicaid.

The second part of the Hall proposal calls for the federal government helping, in cases of catastrophic illness, those persons who can afford normal health care insurance only.

Other national health insurance plans are being sponsored by Walter Reuther, head of the automobile workers' union; the AFL-CIO; Sen. Jacob K. Javits (R., N.Y.), and Gov. Nelson Rockefeller of New York. Indications are that the committee will not give serious consideration to such legislation before next year at the earliest. However, it appears probable that the issue will come to a vote in Congress before the 1972 elections.

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The AMA also submitted to the Ways and Means Committee a statement on the Nixon Administration's "Health Cost Effectiveness Amendments of 1969" legislation.

The AMA commended the Department of Health, Education and Welfare for its efforts to curtail the rising cost of medicaid and medicare, but said that the Association believes "there are better and more appropriate means of meeting this problem."

As for the provision prohibiting payment to physicians who have committed fraud, overcharged or otherwise abused the medicare program, the AMA said: "It should be kept in mind that there presently exist remedies to reach the cases of abuse which may exist—certainly the cases of extreme abuses which HEW has asserted these proposed penalties are intended to reach. While it is true that the law does not provide authority to disqualify physicians as to prospective participation, a carrier may reject or review a physician's claims on an individual basis as each claim is presented."

"The apparent concern of the Congress regarding alleged abuses and increasing program costs may require some changes in the administration of federally financed health care programs. However, the proposed amendments appear to introduce more severe remedies than the problems require."

As for the provision that utilization review committees pass retroactively on the medical necessity of admission of medicare patients to hospitals, the AMA said: "At the present time a utilization review plan of an institution must provide for review, on a sample basis or other basis, of admissions, duration of stays, and services furnished but must provide for review of each case of extended stay and also determine medical necessity of further stay. The law provides for 3 additional days of benefit payments after a negative finding and noti-

fication. Where a finding has been made that the admission was unnecessary, no payment would be made. Thus the denial of payment would be retroactive to the date of admissions. The 3-day grace period is removed from existing law."

"The AMA previously objected to initial certification of the need for admission to a hospital, and this initial certification requirement was removed from the law. Under this bill the utilization review committee would be required to review the attending physician's judgment as to the need for hospitalization. The present requirement of the committee under medicare is to review extended stay cases to determine need for further stay; thus it does not review a great number of cases of hospitalization where the patient is discharged earlier. Requiring committees to review all cases of hospitalization would impose a tremendous burden on the committee, and create additional heavy demands on physicians' productive manhours."

"Adverse finding by a committee would subject the patient to individual liability for hospital charges. As a result, this provision could act as a restraint on patients receiving care, particularly in those cases where a physician recognizes the possibility of differing medical judgments concerning the admission."

MEDICAL NEWS IN TENNESSEE

Tennessee Valley Medical Assembly

The 17th Annual Session of the Tennessee Valley Medical Assembly, originated by Dr. William Stevenson, was held October 13-14. This year's Assembly attracted a total attendance of 1,139, including 541 registered physicians of which 152 were from outside the immediate Chattanooga area. Among this year's outstanding speakers were Dr. Paul Dudley White; Dr. Helen Taussig, a leading pediatrician who performed much of the research on "Blue Babies"; Dr. Alton Ochsner, leading lung cancer specialist; and Dr. G. A. Hallenbeck, who was one of President Johnson's private physicians.

TAGP 21st Scientific Assembly

The 21st Scientific Assembly of the Tennessee Academy of General Practice was held on November 5, 6 and 7 at the Civic Auditorium in Gatlinburg. The total registration was 506 which included 239 physicians, 162 exhibitors, 97 wives of physicians, and 8 staff representatives. Those attending the annual banquet were welcomed by a past-President of TAGP Dr. Thomas Johnson, now of Kansas City. Dr. John S. Derryberry, Shelbyville, was presented with the General Practitioner-of-the-Year Award at the Banquet and the following officers for 1970 were installed:

President: Oscar M. McCallum, M.D., Henderson

President-Elect: Irving R. Hillard, M.D., Nashville

Vice President: Nat E. Hyder, Jr., M.D., Erwin

Secretary-Treasurer: John S. Derryberry, M.D., Shelbyville

Delegate to AAGP: John S. Derryberry, M.D., Shelbyville

Alternate Delegate-AAGP: Oscar M. McCallum, M.D., Henderson

Vanderbilt University Medical School

Dr. Marc H. Hollender, formerly Professor of Psychiatry at the University of Pennsylvania, has been appointed Chairman of the Psychiatry Department at the Vanderbilt University Medical School. Dr. Hollender is a graduate of the Illinois Medical School and has been chairman of the Psychiatry Department at the State University of New York's Upstate Medical Center as well as Director of the Syracuse Psychiatric Hospital. His particular field of interest is psycho-analysis and he has published a book entitled "The Practice of Psycho-Analytic Psychotherapy" which is considered a particularly significant book in the field.

St. Thomas Hospital Television Special

WLAC-Television is preparing to release a second special program dealing with cardiac surgery at St. Thomas Hospital. The TV Station devoted 90 minutes of viewing time to a St. Thomas Cardiac Special last

year which received wide acclaim from the viewing public.

The second special will deal with a new phase of cardiac surgery at St. Thomas. Cardiac Surgeons there have established a human heart valve bank and are using these human valves to replace patient's diseased heart valves whenever possible.

Annual Meeting of the Central Association of Obstetricians and Gynecologists Held in Memphis

The 37th Annual Meeting of the Central Association of Obstetricians and Gynecologists was held on October 16th at the Sheraton-Peabody Hotel in Memphis. Approximately 600 attended the 3-day meeting. The Association is composed of Obstetricians and Gynecologists who live in states that do not border the Atlantic or Pacific. Dr. W. T. Black, Jr., Memphis, was Chairman of the meeting.

PERSONAL NEWS

Dr. David H. Turner, Chattanooga, served as Chairman of the 17th Annual Meeting of the Tennessee Valley Medical Assembly in Chattanooga which was held October 13-14.

Dr. John R. Collins, Chattanooga, has joined **Dr. Fred Ballard, Dr. Walter Puckett,** and **Dr. Winston P. Caine, Jr.** in the practice of Internal Medicine as a Gastroenterologist. For the past four years, Dr. Collins has been Chief of Gastroenterology at Veterans Hospital in Nashville and Assistant Professor of Medicine at the Vanderbilt School of Medicine. He is a Fellow in the American College of Physicians and a member of the American Gastroenterological Association.

Dr. Nathan Porter, Greenfield, and **Dr. Joe Campbell,** Union City, recently discussed the installation of an electrical pacemaker at a meeting of the Greenfield Rotary Club.

Dr. Joseph F. Lentz, Nashville, has been selected by the American Academy of Pediatrics to serve as a Head Start consultant in Tennessee.

Dr. Robert G. Allen, Memphis, spoke before the Section on Surgery at the 38th Annual Meeting of the American Academy of Pediatrics which was held October 18-23 in Chicago.

Dr. A. Dudley Dennison, Jr., Upper East Tennessee Area Coordinator for the Tennessee Mid-South Regional Medical Program, was banquet speaker at a Cardiac Nursing Seminar held in Kingsport.

Dr. John R. Sisk, Harriman, was inducted into Fellowship in the American College of Surgeons at a recent meeting in San Francisco, California.

Dr. R. Graham Fish, Paris, was the guest of honor at a dinner sponsored by the Henry County Medical Society. Dr. Fish recently retired after 41 years of medical practice.

Dr. Charles R. Earnest, Jr., Knoxville, has been elected to active membership in the American Academy of General Practice.

Dr. Robert Demos, President-elect of the Chattanooga & Hamilton County Medical Society, spoke to the Chattanooga Board of Education regarding Sex Education. Dr. Demos suggested that physicians should be enlisted to speak to High School students regarding this important subject.

Dr. John S. Derryberry, Shelbyville, was presented with the General Practitioner-of-the-Year Award at the Annual Meeting of the Tennessee Academy of General Practice in Gatlinburg.

Dr. Vernon H. Reynolds, Associate Professor of Surgery at Vanderbilt University School of Medicine, was the visiting consultant at the RMP Continuing Medical Education program held at the Baroness-Erlanger Hospital in Chattanooga on October 25. The title of the course was "Current Use of Chemo-therapy in Cancer."

Dr. George L. Gee, Jr., Chairman of the Department of Psychiatry at the University of Tennessee Memorial Research Center & Hospital in Knoxville, was the Director of the Continuing Education course entitled "Treatment of the Emotionally Disturbed Person," held October 10 at the Research Center in Knoxville.

Dr. Cecil F. Mynatt, Superintendent of the Eastern State Psychiatric Hospital in Knoxville, was also on the faculty.

Dr. Tom E. Nesbitt, President-Elect of the Tennessee Medical Association, discussed "Medicaid" at the Scientific Session of the Annual Meeting of the Tennessee Academy of General Practice.

ANNOUNCEMENTS

Calendar of Meetings
1970

State

April 9-11, 1970 —Tennessee Medical Association, Sheraton-Peabody Hotel, Memphis

National

Jan. 11-14	—Society of Thoracic Surgeons, Regency Hyatt House, Atlanta
Jan. 17-22	—American Academy of Orthopedic Surgeons, Palmer House, Chicago
Jan. 30-Feb. 1	—Southern Radiological Conference, Grand Hotel, Point Clear, Ala.
Feb. 8-9	—Congress on Medical Education (66th Annual), Palmer House, Chicago
Feb. 25-March 1	—American College of Cardiology, River Gate Hotel, New Orleans
March 8-10	—Atlanta Graduate Medical Assembly, Merritt Motor Hotel, Atlanta
March 20-21	—AMA National Congress on Socio-Economics of Health Care (Fourth) Palmer House, Chicago

ACP Post Graduate Courses Announced

The American College of Physicians (ACP) will hold a five-day Postgraduate course on "Function and Dysfunction of Gastrointestinal Tract" Jan. 2-6, 1970 in Bal Harbour, Fla.

The course, being held in cooperation with the University of Miami School of Medicine, will be held at the Americana Hotel. It is one of 25 postgraduate courses the ACP is conducting throughout the United States and Canada during the 1969-70 academic year to help specialist in internal medicine keep abreast of new knowledge and techniques in the diagnosis and treatment of diseases.

The Bal Harbour course will concentrate on recent advances in gastroenterology that relate to normal and abnormal function, particularly in regard to gastrointestinal secretions and absorptions. Panel discussions will be concerned with diagnostic and therapeutic controversies and will be held daily. Self-assessment examinations will be available for those internists who wish to take them.

Martin H. Kalser, M.D., Miami, Fla., Professor of Medicine and Physiology (Gastroenterology) at the University of Miami School of Medicine, is course director. Co-director is Arvey I. Rogers, M.D., Miami, Assistant Professor of Medicine at the medical school and Chief of the Gastroenterology Section at the Miami Veterans Administration Hospital. The faculty for the course will be drawn from the Medical School, with guest lecturers from the Albert Einstein School of Medicine, the Mayo Clinic, the University of Illinois, Boston University and other institutions.

★

A course entitled "Gastroenterology for Clinical Teachers" will also be held February 23-27, 1970 at the University of Michigan Medical Center in Ann Arbor. This course is primarily intended for internists who have important teaching responsibilites to physicians in all stages of training. Basic science concepts will be developed in depth and their actual or potential clinical application will be illustrated. Emphasis will be placed on absorption and its disorders, on disturbances of hepatic biochemistry, and current immunological concepts related to the gastrointestinal tract. This course will be designed to allow ample opportunity for discussion between participants and faculty.

University of Kentucky Continuing Education Courses

The following courses will be sponsored by the Office of Continuing Education, College of Medicine, University of Kentucky at Lexington:

Current Concepts in Gastro-Intestinal & Biliary Tract Surgery
January 21, 1970
Albert B. Chandler Medical Center
University of Kentucky

Symposium: Modern Methods for the Medical Work-Up
January 29-31, 1970
Albert B. Chandler Medical Center
University of Kentucky
Fee: $100.00

Advanced Hematology Techniques
March 18-20, 1970
Albert B. Chandler Medical Center
University of Kentucky
Fee: $150.00

Head and Neck Disorders in Children
March 18-20, 1970
Albert B. Chandler Medical Center
University of Kentucky
Fee: $75.00

East Tennessee Radiological Society Officers Elected

At the Annual Meeting of the East Tennessee Radiological Society, the following officers were elected:

President: William A. Nelson, M.D., Knoxville
President-Elect: Sam H. Hay, M.D., Murfreesboro
Vice-President: James W. Gibson, M.D., Johnson City
Secretary-Treasurer: E. F. Besemann, M.D., Chattanooga

The next Annual Meeting of the Society will be held the first weekend after Labor Day in Gatlinburg, but the date for the mid-winter meeting has not yet been announced.

routine periodic blood counts before and during therapy. Any unexpected, significant change in the total white count, relative decrease in granulocytes, or appearance of immature forms should be regarded as a signal for immediate cessation of therapy and institution of appropriate countermeasures. Thrombocytopenic purpura and aplastic anemia must also be considered possible side effects of therapy with Butazolidin, brand of phenylbutazone.

Stress: Surgery: Prolonged use of prednisone may cause a potentially critical degree of adrenocortical insufficiency which may persist even after cessation of prednisone therapy. Therefore, if a patient is subjected to significant stress, such as surgery or trauma, either during Sterazolidin therapy or within one year after cessation of therapy, it is advisable to administer additional steroid and/or ACTH for the duration of the stress. Delayed wound healing may also occur in patients on prolonged therapy.

Infections: High or prolonged doses of prednisone interfere with the usual immune mechanisms against bacterial and viral infections and may promote their dissemination. In general, steroid treatment should not be given in the presence of infections unless appropriate antibiotic therapy is instituted at the same time. Systemic and localized infection complications during hormone therapy have been observed, including fulminating pneumonia, tuberculosis, moniliasis and aspergillosis. Should intercurrent infection develop, indicated antibiotic therapy must be initiated promptly. Every patient who is to receive Sterazolidin for any length of time should be thoroughly examined, including chest x-ray, for the presence of pulmonary or extrapulmonary tuberculosis.

Hormonal Imbalance: Gluco-corticoids, in prolonged dosage, may cause manifestations of hypercortisonism or Cushing's syndrome, such as: moonface, abnormal fat deposits, mental disturbances, muscle weakness and atrophy, cutaneous striae, acne, ecchymoses, hirsutism, menstrual disturbances, edema, osteoporosis and spontaneous fractures, and hypertension. Also, by suppressing adrenocortical function, chronic prednisone therapy may cause some degree of atrophy of the adrenal glands. Therefore, if Sterazolidin is to be discontinued, the steroid dosage should be tapered off gradually. In addition, it may be advisable to stimulate the adrenal glands with ACTH. Prednisone induces a prompt decrease in the urinary 17-ketosteroids. Pretreatment levels are usually regained within 7 to 14 days after cessation of therapy. Under conditions of long-term administration, a small percentage of patients on phenylbutazone may develop varying degrees of reversible thyroid hyperplasia.

Allergic Response: Development of drug rash should alert the physician to promptly discontinue the drug. The presence of prednisone in Sterazolidin may reduce the degree of allergic response; nevertheless, the same cautious attitude must be preserved with Sterazolidin as with Butazolidin, brand of phenylbutazone, if allergic manifestations occur. Other adverse reactions that have been observed with glucocorticoid therapy include: excessive appetite and weight gain, hyperidrosis, pigmentation, dry,scaly skin, thinning scalp hair, tachycardia, thrombophlebitis, headache, neuropathy (including paresthesias and neuritis), diffuse vasculitis similar to periarteritis nodosa, subcapsular cataracts, impaired renal function, lupus erythematosus-like changes, convulsions, insomnia, abdominal distention, aseptic necrosis of the femoral head, acute pancreatitis and ulcerative esophagitis.

Miscellaneous: Stomatitis and, rarely, salivary gland enlargement occasionally require the interruption of treatment with Butazolidin, brand of phenylbutazone. Adoption of a lower dosage schedule and the institution of strict oral hygiene sometimes prevent recurrence of lesions. The infrequent occurrence of such subjective sensations as vertigo or languor during therapy with Butazolidin, brand of phenylbutazone, is seldom a serious or significant complication. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hepatitis and jaundice, hypersensitivity angiitis, pericarditis and several cases of anura and hematuria. Patients should be carefully evaluated before treatment is started and those receiving Sterazolidin must remain under close medical supervision to guard against undesirable reactions such as those described. They should be instructed to report immediately the occurrence of fever, sore throat, lesions in the mouth, or black or tarry stools. It is recommended that periodic examinations of the patient include:

1. Verbal and physical examination, including blood pressure and appraisal of the cardiovascular, digestive and skeletal systems, for indications of toxic reaction.
2. Complete blood count (at weekly intervals during the first month), urinalysis, x-ray and electrolyte studies, as indicated.
3. Check of patient's weight to detect significant water retention.

Dosage Dosage should be individualized. The following general rules should be observed:

In acute therapy, dosage *should not exceed* 12 capsules on the first day and 6 to 8 capsules on succeeding days. Treatment for more than 7 days is rarely necessary. When therapy extends beyond one week, dosage should not exceed 6 capsules a day.

In chronic therapy, dosage *should not exceed* 6 capsules a day and should be tapered off gradually to establish the minimum maintenance level at which the patient still feels reasonably comfortable. A trial period of one week of therapy is considered adequate to determine the therapeutic effect of the drug. In the absence of a favorable response, therapy should be discontinued.

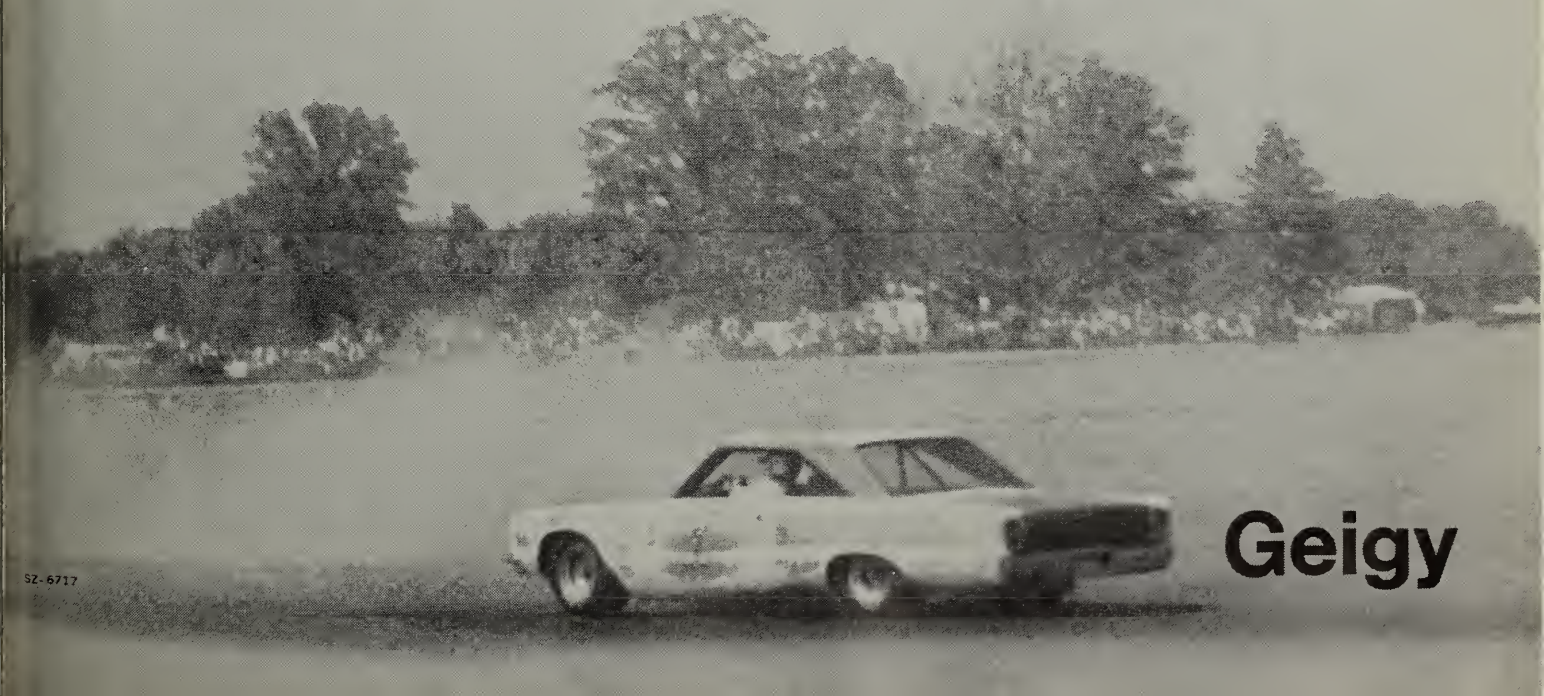
When switching from chronic high steroid therapy to Sterazolidin, the importance of gradual reduction of steroid dosage cannot be overemphasized. It should be kept in mind that the sterold content of 8 capsules of Sterazolidin will replace 10 mg. of prednisone (or its equivalent in related steroids).

Clinical experience indicates that most patients with rheumatoid arthritis may eventually be maintained on 3 to 6 capsules of Sterazolidin a day. It is advisable to administer the total daily requirement in divided doses.

Availability Sterazolidin: Light blue and orange capsules, in bottles of 100 and 1000.
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TMA THE VIEWING BOX

Drs. Wilbur and Rogers Differ on Future of Medicine

(A TV Interview on Today Show)

EDWIN NEWMAN: Americans spend $54 billion a year on medical care and yet, a Presidential committee, after a lengthy study, has asserted that the present state of America's health services is so deplorable that it amounts to a national crisis. Now, we're going to examine the situation now with two eminent men of medicine, Dr. David E. Rogers, Dean of the Medical Faculty of Johns Hopkins University Medical School in Baltimore, who is severely critical of the way his own profession is functioning, and Dr. Dwight L. Wilbur of San Francisco who, as President of the American Medical Association, speaks for the most powerful organization in our health system.

Gentlemen, we'd like to deal with three basic questions: Is the crisis as serious as the Presidential committee says it is; if so, what are the causes; and what should be done about it.

Let's start with Dr. Rogers. What do you think is wrong, if you do indeed think something's wrong, with health care in the United States?

DR. DAVID E. ROGERS: I realize your three questions are a large order there, Mr. Newman, but I think we are in for serious problems. I think it really has to do more with the distribution of health care than anything else. I think all of us are concerned about the inequities of care for different population groups—particularly rural areas, urban ghettos. I think we are concerned about the maldistribution of doctors, of nurses . . .

NEWMAN: Is this a geograpical matter or an economic matter?

ROGERS: I think it's both. I think part of it has to do with geography in terms of where doctors locate, where our major centers are. I think our major concern—or, my major concerns are the non-system, if you will, that we have—the lack of organization of the health system, which makes it hard for a patient to know where to initiate his care and how to move into the system.

NEWMAN: Do you accept that there is a national crisis?

ROGERS: I think we're approaching one in terms of problems in this area, yes.

NEWMAN: What would you say about that, Dr. Wilbur?

DR. DWIGHT L. WILBUR: Well, Mr. Newman, I think a good deal depends on how you define the question. Certainly, for some people, one can say there is a crisis, particularly in terms of shortages of physician services in certain areas in the cities and in certain rural areas in this country, but in terms of a national crisis that we're used to such as in relationship to, let's say, the depression or what goes on at time of war, I don't think you can say there really is a crisis.

NEWMAN: Do the two of you agree on the size and nature of the problem, then? If you like, we won't use the word 'crisis'; let's say 'problem'. Are you in agreement on what the problem is, and how bad it is?

WILBUR: Well, maybe I might start off on that, if I may, and say I think basically the problem is that medicine has been such a great success that the demand for medical services has far outstripped our ability as a profession to render the service, and not only in terms of doctors and in terms of facilities, but in terms of financing the health care of 203 million Americans.

ROGERS: I in general would agree . . .

NEWMAN: Dr. Rogers?

ROGERS: . . . with this, yes. I think it has

outstripped our capacity, and I think, as with many other elements in our society, nowadays, we really haven't organized the system well enough to deliver what we know how to deliver, which I think is a major concern, both to the consumer and for doctors.

NEWMAN: What about the profession itself, Dr. Rogers? Has it done what it should have done?

ROGERS: I would say not to the extent of its capabilities. I think, again, this could be said about many sectors of our society right now but that we're suddenly recognizing that we're well behind in terms of organizing the system in responsible ways for the consumer, for the patient.

NEWMAN: You said in a recent address, Dr. Rogers, that the physician has—I'm reading, I'm quoting—"has not met his responsibility to society and has not been trained to do so." What did you mean by that?

ROGERS: My recollection is that I was talking here about our—some of our failures to really involve the young physician in some of the social responsibilities that go with medicine. I think I was making the point that we've made, probably, the world's best bio-medical scientist out of our young physician, but that we've had—we have, in the process, kind of ignored the fact that he may have social responsibilties which extend beyond being just a scientist. Dr. Wilbur may want to comment, but I would like to come back to this point.

NEWMAN: Please.

WILBUR: Well, I think there's quite a bit of truth in what Dr. Rogers has said. Again, this brings us to the fact that there has been, really, a social revolution in this country in the last 20 years and that this has changed our society markedly, and with this change there has been an increasing demand for health care.

NEWMAN: Has the medical profession itself—and this is, I think, a general impression—deliberately kept down the numbers of people who are allowed to become doctors?

WILBUR: No. This is absolutely untrue. No.

NEWMAN: Not true?

ROGERS: I would say untrue, also, Mr. Newman. I think the point I wanted to make, if I could extend. . .

NEWMAN: Please.

ROGERS: . . . the one before, is that we now have such tremendous technology in medicine—let me use, as an example, the fact that where pneumonia used to cause a 20 per cent mortality, now with antimicrobials it causes less than one per cent in a young population group—but we have, I think quite appropriately, concentrated with the young physician on how to make this diagnosis and deliver that type of care, feeling that the handholding features of the old-time practitioner were less important than being able to deliver the proper drug at the proper time.

So I—my point being that I think we've concentrated on biomedical science for a good reason, but now we're moving into another phase of medicine where. . .

NEWMAN: Which is what? The social organization of it?

ROGERS: . . . Where clearly the social organization of it is a big and important responsibility for us.

NEWMAN: Well, in that connection, let me ask about a specific thing. The Presidential committee that made the report cited as one point worth thinking about that the infant mortality rate in the United States was the lowest in the world 20 years ago and now we rank 15th. We used to be best and now we're 15th. Now, Dr. Wilbur, who is to blame for that, if anybody is?

WILBUR: That's a very hard question to answer, because it's not purely a matter of medicine; it has to do with many other factors in life, including housing, food, education, the willingness of the patient—the woman who's going to have the baby—to see her physician on time, during her pregnancy, and this is largely a matter of education. This infant mortality rate is discussed and debated a good deal because the statistics of one country to another will vary, and in some of our cities where there are very good medical facilities, infant mortality is surprisingly high, which indicates that the facilities alone are not the important thing—that people have to want to use these facilities—they have to learn that they should use them earlier than they do.

NEWMAN: Well, this is part, then, of the

social organization question, is it, Dr. Wilbur?

WILBUR: Yes, it is.

NEWMAN: Social application . . .

WILBUR: That's right. And not purely the result of something that's not being done by doctors.

NEWMAN: Dr. Rogers, you have said—this, I think is a quote—it may be a paraphrase—that the entrepreneurial system of medical practice is obsolete. What do you mean by 'the entrepreneurial system' and why do you think it's obsolete?

ROGERS: Well, I was—it's been my feeling that the solo practice of medicine, the individual physician functioning quite in isolation from other physicians—that this day is obsolete, that, again, our technologic knowhow is so great I think we must organize a system so that groups of physicians, or groups of physicians working with other kinds of health professionals, can form a consortion of some sort to which the patient comes. They could develop—to deliver the kind of care we really can to human beings nowadays, it can't all rest in the mind of one man, and I think consequently the solo practice of medicine is on the way out and probably should be in terms of our—the knowledge we now possess about how to deliver proper care.

NEWMAN: Dr. Wilbur?

WILBUR: Well, I'm going to take a little different view than Dr. Rogers on that. Unquestionably, there is a trend toward group practice and whenever one has a complicated situation, obviously a group is necessary, but so many illnesses nowadays can be handled by a single physician and—in solo practice—and a physician in solo practice can use his associates and has available the same facilities as a group does in terms of what we call the 'allied health professionals,' that he can do a very effective job. And there are many people who really prefer to go to a single physician in solo practice and I think this will always be the case.

NEWMAN: Do you have a reply to that, Dr. Rogers?

ROGERS: I do. I have enormous respect for Dr. Wilbur; we've worked together on a number of things. But I think this is an issue on which we would separate. I think not only for the reasons that I mentioned, but, as an educator, I realize that it is increasingly difficult to attract the young man to that kind of isolated existence and I think, in terms of what we want out of physicians today, their continuing education is critical, which means, I think, they should have continuing daily contact with other physicians. I think, in terms of the kinds of social situations they desire and the sorts of lives that they wish to lead, that the solo practice of medicine is phasing out, and that we ought to accept this fact, and decide what can we do with our present knowhow to replace it with a system which is as good or better.

I fully agree with Dr. Wilbur's point about the—that one human being really has to have one physician responsible for him. And here, I think we would feel very similarly. One cannot be taken care of by committee. One doctor has to take responsibility for a human, but I think groups of physicians are going to be able to support each other in ways that will further their education and make the medical system better for our population.

WILBUR: Well, I might point out, if I may, that such physicians in solo practice really do have this opportunity because most of them belong to the staff of a hospital, or they're in a professional building or set up where they have available consultation with others in the field of . . .

NEWMAN: Dr. Wilbur, as Dr. Rogers said, this is a point on which the two of you . . .

WILBUR: Yes—obviously going to diverge.

NEWMAN: Gentlemen, is there any case, do you think, for having a health service in this country, something like the one the British have and some other countries have?

WILBUR: Well, let me answer that by saying, no. I think the level of practice in this country is such that we really are the envy of the world, despite the fact that our system is not a perfect one, and I think this is indicated by the fact that some 19,000 foreign medical graduates take an examination to try to get into this country every year, for further training and for experiences in this country.

NEWMAN: Dr. Rogers?

ROGERS: Well, I would answer it somewhat differently, in that I think we must

develop some delivery system. If your question is, should this be a nationalized health system, the commission of which Dr. Wilbur was a member pointed out that really the job is too big for government to do alone; I think it's going to take the cooperative efforts of all of us to design a system where the patient knows where he should enter the health system, how it—where he should move as his illness grows more complex. But I do think we must develop some overall system for the delivery of care, both for the efficiency of physicians and so that patients can use it properly.

NEWMAN: Got about thirty seconds left, Dr. Wilbur . . .

WILBUR: Well, I'd like to comment on that . . .

NEWMAN: . . . would you like the last word?

WILBUR: . . . I think we ought to have multiple systems, because this country is so diverse, with its rural and urban problems, that to have a single system would be inadvisable. And the other advantage of diversity is that you, by experience, gain knowledge as to how best to deliver the health care that we have available.

NEWMAN: Thank you very much, Dr. Wilbur . . .

ROGERS: I would share that view—that it should be a multiple.

NEWMAN: . . . and thank you, Dr. Rogers.

(From the *Journal of the Medical Association of the State of Alabama* 32:157, (Aug.) 1969.

* * * * *

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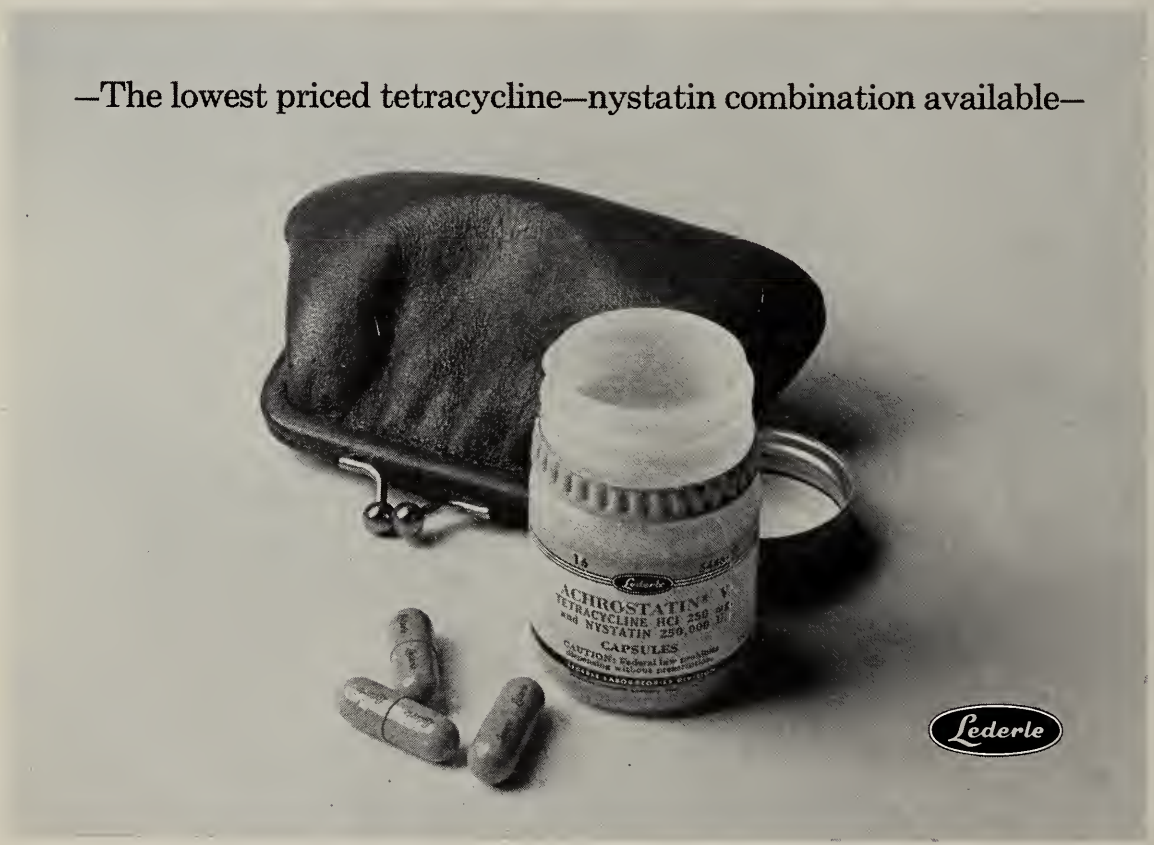
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An alphabetical listing of members of The Tennessee Medical Association by County Medical Society is published as a service to the membership. The various membership categories are noted by special symbols. * denotes Veteran Status; ‡ denotes Post-Graduate Status; † denotes Military Status.

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*John E. Frazier
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Orville Carlos Gass
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George Clive Gibson
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*Paul M. Golley
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Wallace D. Grissom
*Oscar Doyle Groshart
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R. B. Hagood, Jr.
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John C. Hampton
Herschel B. Harris
Elliott F. Harrison
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Charles W. Hawkins
Paul E. Hawkins
James Martin Hays
Thomas E. Hayes
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†James W. Hedden
R. S. Hellmann
H. B. Henning
John William Henry
Warren B. Henry
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J. M. Higgason
J. M. Higginbotham
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P. B. Holliday, Jr.
Benton B. Holt, Jr.
Charles M. Hooper
R. A. Hoppe
Donald Ross Hornsby
W. P. Hutcherson
D. Isbell
Dewitt B. James
E. G. Johnson
J. Paul Johnson, Jr.
James Paul Johnson
J. W. Johnson, Jr.
Gerald Isom Jones
Harry E. Jones
David Bernard Karr
C. D. Kennedy
J. J. Killeffer
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Warren H. Kimsey
Roy W. Kirchberg, Jr.
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Durwood L. Kirk
G. H. Kistler
D. K. Kitchen
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Willis Edward Lemon
E. C. Lineberger
P. H. Livingston
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Ira Morris Long
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W. B. MacGuire, Jr.
D. V. MacNaughton, Jr.
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*S. S. Marchbanks
C. B. Marsh
Frederick E. Marsh
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David P. McCallie
Augustus McCravey
Martha W. McDonald
Preston C. McDow
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Edel F. McIntosh
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George A. Mitchell
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T. F. Mullady, III
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R. Smith Murray
R. W. Myers
Fujie Nakamura
Marvin Myer Nathan
Merrill F. Nelson
Cecil E. Newell
E. T. Newell, Jr.
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Paul V. Nolan
N. B. Norris, Jr.
Barry Parker Norton
Robert N. Osmundsen
W. C. Pallas
James P. Pappas
*Ashby M. Patterson
Robert L. Patterson
Ernest White Patton
William C. Patton
Stanley R. Payne
Martin Allen Perez
Millard Foy Perrin
W. A. Peterson, Jr.
Wesley Petty
W. H. Price
M. C. Pruitt
Walter Puckett, III
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Joe Anne Quillian
Millard W. Ramsey
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W. D. L. Record
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J. R. Reynolds
‡Alexander Rhoton
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William Edward Rowe
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Don Jere Russell
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Myron J. Szczukowski
George N. Taylor
Thomas E. Taylor
Bernard Tepper
Jack Tepper
M. O. Tepper
Guy K. Terrell
*Charles R. Thomas
Paul C. Thompson
Robert C. Thompson
D. H. Turner
A. Steven Ulin
Louis Ulin
M. R. Vance
W. E. VanOrder
Roger Gordon Vieth
Gus John Vlasis
C. H. Von Cannon
M. Von Werssowetz
O. F. Von Werssowetz
Harry Lee Walton
R. A. Waters
W. Weathers, Jr.
L. Spires Whitaker, Jr.
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J. L. Williams, Jr.
Julian Macow Yood
George G. Young
M. M. Young
Guy Zimmerman, Jr.
Joseph I. Zuckerman

Copperhll

Herschel H. Hyatt
J. T. Layne

Daisy

James P. Wallace

Dayton

Ernest A. Forsten
L. F. Littell, Jr.
James Jacob Rodgers
W. A. Thomison

Dunlap

Leslie David Ekvall
Charles G. Graves

East Ridge

Frank C. Combes

Franklin

*Martin A. Meacham

Hixson

Robert J. Pitner

Jasper

James G. McMillan

Lookout Mountain

J. J. Armstrong
James L. Caldwell
Thomas Sparrow Long

Pikeville

Thomas G. Cranwell
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Rossville, Georgia

W. D. Crawley
James C. Wright

Signal Mountain

M. F. Langston
T. H. Rybachok
A. Y. Smith, III

Soddy

A. Hallett-Sylvester

South Pittsburg

Horace Levoy Elmore
J. B. Havron
William L. Headrick
Hiram Beene Moore
E. M. Ryan
Viston Taylor, Jr.

Whitwell

Cleo Chastain
W. G. Shull

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Memphis

H. S. Henderson III

Morristown

Jerry J. Crook

Newport

D. H. McConnell
Drew A. Mims
William B. Robinson
Glenn Shults
F. M. Valentine, Jr.
F. M. Valentne, Sr.

COFFEE COUNTY MEDICAL SOCIETY

Manchester

C. H. Farrar

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‡Post-Graduate
†Military

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John A. Shields
Coulter S. Young

Tullahoma

Ralph Brickell
Jack T. Farrar
Marvin C. Fraley
Bruce E. Galbraith
Edwin E. Gray
C. B. Harvey
James M. King
Charles W. Marsh
Earl E. Roles
Claude C. Snoddy
Charles H. Webb

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Adamsville

Harold W. Vinson

Alamo

J. H. Donnell

Bells

*Elisha Farrow
Charles Hickman
Russell W. Mayfield

Bemis

A. N. Williams, Jr.

Bolivar

Harvey H. Barham
Douglas L. Brint
C. L. Durham
Charles L. Frost
Bedford F. McAnulty
*James K. Tate, Jr.

Brownsville

*Thomas C. Chapman
Harold L. Gilliand
David E. Stewart
J. C. Thornton, Jr.
J. K. Welch, Jr.

Bruceton

*Robert T. Keeton

Camden

Alvin T. Hicks
Robert L. Horton

Grand Junction

Nicholas H. Edwards

Henderson

Darrell King
Oscar M. McCallum
H. M. Steadman
R. L. Wilson

Humboldt

Billy L. Couch
J. H. Crenshaw
T. M. Crenshaw
Albert H. Fick
Robert C. Hall
Danny J. Riddick
William H. Roberts
James D. Rozzell
George E. Spangler

Huntingdon

Jerry F. Atkins
Robert B. Wilson

Jackson

C. V. Alexander, Jr.
Harvey Anderson
Roy Appleton
Thomas K. Ballard
James Barker
*G. H. Berryhill
S. L. Bicknell
Jack H. Booth
Swan Burris, Jr.
*Swan Burris, Sr.
J. H. Chandler
Charles W. Cox
Edward F. Crocker
William G. Crook
George D. Dodson
Jack E. Douglass
R. A. Douglass, Jr.
Clarence Driver
Blanche S. Emerson
Blair D. Erb
*William T. Fitts
James R. French
Fred Friedman
Oliver H. Graves
Walton W. Harrison
George Harvey
G. E. Hazelhurst, Jr.
Bobby Higgs
Robert S. Hill
Ben F. House
G. B. Hubbard
Leland M. Johnston
Chester Jones
G. Frank Jones
Duval H. Koonce
James D. Lane
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Robert B. Mandle
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Harold T. McIver
A. L. Middleton
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Lamb B. Myhr
Roy M. Neudecker
George Pakis, Jr.
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*John E. Powers
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John G. Riddler
Lee C. Sheppard, Jr.
Harris L. Smith
Robert J. Smith
Charles Stauffer
James L. Thomas
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S. A. Truex, Jr.
R. T. Tucker, Jr.
F. E. Williamson, Jr.
George Wyatt
Paul E. Wylie
Harold R. Yarbro

Kenton

A. H. Gray

Lexington

Max Aldon Crocker
Wesley F. Jones
Maurice N. Lowry
Warren C. Ramer
Jack C. Stripling
Charles W. White

McKenzie

James T. Holmes
James H. Robertson
S. S. Walker, Jr.

Medina

Robert H. Morris

Milam

Hubert P. Clemmer
James O. Fields
F. L. Keil
James H. Williams
Phillip G. Williams

Saltillo

Howard W. Thomas

Savannah

H. D. Blankenship, Jr.
Reece DeBerry
John D. Lay
Thomas V. Roe
Howard Whitaker, Jr.
Thomas R. Williams

Selmer

T. N. Humphrey
Harry Peeler
James H. Smith
Monte E. Smith, Jr.

Somerville

J. L. Armstrong
John M. Bishop
Frank S. McKnight
*John W. Morris
L. H. Plemmons
Karl Byington Rhea
Lee Rush, Jr.

Trenton

Edward C. Barker
Eugene C. Crafton, Jr.
John Wesley Ellis
James I. Elliott
James W. Hall
C. L. Holmes
*Minyard Dee Ingram
B. G. Thompson
J. L. Williams

Western State

Armando F. Delgado
James H. Druff

Whiteville

Aubrey Richards

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Crossville

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R. E. Cravens
Carl T. Duer
Paul A. Ervin, Jr.
William E. Evans
Donathan R. Ivey
H. F. Lawson
Fred W. Munson
*Stuart P. Seaton
Ramon S. Vinas
Joe K. Wallace

Lebanon

Harvey H. Grime

Pleasant Hill

*Laurence A. Chrouch
*Margaret K. Stewart

DAVIDSON COUNTY MEDICAL SOCIETY

Ashland City

James Baldwin

College Grove

*George A. Hatcher

Donelson

E. E. Anderson
Luther A. Beazley
Roy C. Ezell
Robert B. Gaston
Luther E. Smith
W. B. Wadlington

Franklin

*John B. Youmans

Goodlettsville

Lee F. Kramer

Hendersonville

Charles M. Cowden
Warren T. Hill
Robert D. Pilkinton

Madison

Joe Gary Allison
Charles B. Beck
L. Dale Beck
James E. Burnes
Robert E. Burr
William J. Card
Sam W. Carney, Jr.
Frederec B. Cothren
Hillis F. Evans
*Julian Gant
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James M. High
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Jerry Hunt
Cyrus E. Kendall
Douglas W. Kendall
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H. T. McCall
Mehmet H. Nazli
J. C. Pennington, Jr.
R. L. Pettus, Jr.
Fred W. Ryden
Joseph W. Scobey
Joe Sutherland
Jack Swan
Richard P. Taber
Harry Witztum

Memphis

*Harold M. Truebger

Murfreesboro

Jacob N. Fidelholtz

Nashville

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Robert W. Adams, Jr.
Benton Adkins
I. A. Alcantara
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William C. Alford
J. H. Allen, Jr.
Clyde Alley, Jr.
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Ben J. Alper
Arthur R. Anderson
Edward E. Anderson
Edwin B. Anderson
H. R. Anderson
J. E. Anderson, Jr.
J. S. Anderson, Jr.
Robert S. Anderson
William C. Anderson
Wlliam H. Armes, Jr.
Larry T. Arnold
Harvey Asher
Daniel Baccus
Harry Baer
*J. Mansfield Bailey
Thurman Dee Baker
*Sidney W. Ballard
Preston Hite Bandy
*Edward H. Barksdale
Paul Harold Barnett
Allan D. Bass
Jack M. Batson
Randolph Batson
D. Scott Bayer
Eric Bell, Jr.
Lynch D. Bennett
‡George N. Benson
Edmund W. Benz
Stanley Bernard
Geoffrey Berry
John H. Beveridge
Otto Billig
F. T. Billings, Jr.
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Ben J. Birdwell
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Lindsay K. Bishop
Joseph M. Bistowish
Robert L. Bomar, Jr.
Arthur G. Bond
John Benjamin Bond
Robert C. Bone
G. W. Bounds, Jr.
*Anna M. Bowie
Hugh H. Boyle
John M. Boylin
*Henry B. Brackin, Sr.
H. B. Brackin, Jr.
Cloyce F. Bradley
David V. Bradley
*G. Hearn Bradley
James M. Brakefield
E. Brooks Brantly
T. E. Brittingham
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Dorothy L. Brown
James H. Brown
E. W. Browne, Jr.
Harry Gray Browne
*Clinton E. Brush
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R. D. Buchanan
R. N. Buchanan, Jr.
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Joseph G. Burd
Henry Burko
Helen C. Burks
George R. Burrus
Roger B. Burrus
*Beniamin F. Byrd
B. F. Byrd, Jr.
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William L. Caldwell
James J. Callaway
Calvin L. Calhoun
Richard O. Cannon
Joe Melville Capps
G. K. Carpenter, Jr.
*G. K. Carpenter, Sr.
Charles M. Carr
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Robert A. Carter
Anthony D. Casparis
Norman M. Cassell
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*John S. Cayce
Lee F. Cayce
Robert L. Chalfant
Eric M. Chazen
William J. Cheatham
Abraham Pacha Cheij
Jerrie Cherry
Amos Christie
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Kenneth L. Classen
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George Boyd Crafton
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William B. Crenshaw
Angus M. G. Crook
Jerrall P. Crook
R. R. Crowe
E. Perry Crump
W. Andrew Dale
Rollin A. Daniel, Jr.
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Philip V. Daugherty
George William Davis
Michael David Davis
*Theodore W. Davis
Thos. C. Delvaux, Jr.
H. C. Dennison, Jr.
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Walter L. Diveley
*William C. Dixon
William M. Doak
William D. Donald
Earl D. Dorris
Robert Thomas Doster
*Beverly Douglas
*Henry L. Douglass
Fred M. Downey, Jr.
L. Rowe Driver
Ray L. Dubuisson
Price H. Duff
George E. Duncan
Herbert Duncan
Thomas Ray Duncan
*L. W. Edwards
Robert H. Edwards
William H. Edwards
Lloyd C. Elam
Paul D. Elcan
James H. Elliott
P. C. Elliott
James W. Ellis
Charles W. Emerson
Irwin B. Eskind
E. William Ewers
R. A. Ewing, III
Don L. Eyler
Aly Fahmy
Leslie Falk
William T. Farrar
J. L. Farringer, Jr.
William B. Farris
W. H. Faulk, Jr.
Gerald M. Fenichel
Harold A. Ferguson
Ray O. Fessey
John P. Fields
Robert M. Finks
Benjamin Fisher
James H. Fleming, Jr.
*Ross Fleming, Jr.
John M. Flexner
Howard R. Foreman
Garth E. Fort
John H. Foster
S. Benjamin Fowler
Richard France
R. J. Freeman
Walter W. Frey
Horace Merion Frazier
John W. Frazier, Jr.
Thomas Friddell
Thomas F. Frist
Thomas F. Frist, Jr.
James L. Fuqua
Don L. Gaines
*R. K. Galloway
Charles K. Gardner
James C. Gardner
Sam Young Garrett
*Horace C. Gayden
C. N. Gessler
Charles M. Gill
Michael E. Glasscock
John P. Glover, Jr.
John R. Glover
W. G. Gobbel, Jr.
Fred Goldner, Jr.
James E. Goldsberry
Donald A. Goss
David K. Gotwald
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Clifton E. Greer, Jr.
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Robert J. Griffon
John H. Griscom
Thomas Grizzard
Erich B. Groos
Laurence Grossman
Milton Grossman
W. E. Gupton, Jr.
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David W. Hailey
Charles E. Haines
Wallace H. Hall, Jr.
Thomas B. Haltom
C. M. Hamilton
J. R. Hamilton
William M. Hamilton
Roy G. Hammonds
Axel Carl Hansen
Robert A. Hardin
Jackson Harris
John Harris
Perry F. Harris
Robert C. Hartmann
Aubrey B. Harwell
*O. S. Hauk
James T. Hayes
James William Hays
J. H. L. Heintzelman
James B. Helme
J. L. Herrington, Jr.
John G. Herzfeld
B. K. Hibbett, III
*J. B. Hibbetts, Jr.
*William Higginson
Elmore Hill
Irving R. Hillard
John William Hillman
Charles S. Hirshberg
*J. Harvill Hite
Charlie Joe Hobdy
G. W. Holcomb, Jr.
Fowler Hollabaugh
†John D. Hopkins, Jr.
Robert G. Horn
Wilder W. Hubbard
C. H. Huddleston
James M. Hudgins
Granville W. Hudson
Jerry K. Humphreys
Joseph E. Hurt
Janet K. Hutcheson
R. H. Hutcheson, Jr.
Vernon Hutton, Jr.
Maurice Hyman
M. D. Ingram, Jr.
A. P. Isenhour, Jr.
Joseph M. Ivie
J. Kenneth Jacobs
*D. J. Johns
Alfonso P. Johnson
*Hollis E. Johnson
Ira T. Johnson
James W. Johnson
Marshall Johnson
R. M. Johnson
C. R. Johnston
Dan B. Jones
E. Palmer Jones
Frank E. Jones
John R. Jones
Orrin L. Jones, Jr.
Thomas M. Jordan
*R. H. Kampmeier
Herman J. Kaplan
David T. Karzon
*Alvin E. Keller
J. Allen Kennedy
W. G. Kennon, Jr.

*Veteran
‡Post-Graduate
†Military

Robert G. Kiger
Duncan A. Killen
Jack P. Kinnard
Lowry Dale Kirby
Carl T. Kirchmaier
Eugene Klatte
Ralph R. Kling, Jr.
O. Morse Kochtitzky
Leonard J. Koenig
Kent Kyger
Charles J. Ladd
Roland D. Lamb
Lawrence P. Laughlin
Horace T. Lavely, Jr.
Samuel J. LaVoi
G. Allen Lawrence
‡Robert L. Lawrence
Albert R. Lawson
*John M. Lee
*John J. Lentz
Joseph F. Lentz
Virgil S. Le Quire
James P. Lester
Malcolm R. Lewis
*Milton S. Lewis
Grant W. Liddle
Richard C. Light
Rudolph Alvin Light
Joanne Lovell Linn
Robert Joseph Linn
A. B. Lipscomb
Joseph A. Little
T. C. Littlejohn
James P. Loden
H. Newton Louvorn
Jackson P. Lowe
S. L. Lowenstein
*Frank H. Luton
Philip L. Lyle
Charles W. MacMillan
Robert D. MacMillan
Robert H. Magruder
Guy M. Maness
*W. R. Manlove
George V. Mann
Edward H. Martin
*Travis H. Martin
Ralph W. Massie
J. Andrew Mayer
Ben R. Mayes
G. Sydney McClellan
Robert E. McClellan
C. C. McClure, Jr.
Robert L. McCracken
Alexander McLeod
John W. McMahan
M. Charles McMurray
E. W. McPherson
Barton McSwain
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Arnold M. Meirowsky
Cullen R. Merritt, II
Robert M. Metcalfe
Andrew H. Miller
Cleo M. Miller
Joe Morris Miller
John Maurice Miller
*Lloyd C. Miller
James Brown Millis
Lee R. Minton
Carl E. Mitchell
Edwin H. Mitchell
Thomas F. Mogan
Roy W. Money
Harry T. Moore, Jr.
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P. G. Morrissey, Jr.
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James R. Moyers
*D. L. Munpower
I. Armistead Nelson
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Dewey G. Nemec
Tom E. Nesbitt
Elliott Voss Newman
Oscar F. Noel
Margaret S. Norris
Robert C. Northcutt
William T. Nunes
John R. Olson
Stanley W. Olson
William Fred Orr
James C. Overall
Ronald E. Overfield
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T. F. Paine, Jr.
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Bernard J. Pass
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Frank A. Perry
Michael A. Petrone
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D. R. Pickens, Jr.
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Phillip P. Porch, Jr.
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David B. P'Pool, Jr.
Edgar Allen Proctor
Joseph A. Pryor
Robert William Quinn
James S. Read
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Eugene M. Regen
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Robert N. Reynolds
Vernon H. Reynolds
*Wilton E. Reynolds
Robert K. Rhamy
Lenore De Sa Ribeiro
John R. Rice
James P. Richards
Greer Ricketson
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F. C. Robinson
Edward A. Rogers, Jr.
Howard E. Rosen
Marvin J. Rosenblum
Sol A. Rosenblum
Louis Rosenfeld
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Fred A. Rowe, Jr.
Robert Monroe Roy
*Berry T. Rucks
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Samuel B. Rutledge
Robert N. Sadler
Howard L. Salyer
Louis Sampson
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Paula F. Sandidge
Houston Sarratt
John L. Sawyers
Julia E. Sawyers
J. H. Sayers, Jr.
C. D. Scheibert
Stephen Schillig
Jack Carlyle Schmitt
Lawrence G. Schull
Herbert Shulman
H. William Scott, Jr.
Addison B. Scoville
C. Gordon R. Sell
Sarah W. Sell
S. A. Shaffer
John L. Shapiro
Ben A. Shelton
W. F. Sheridan, Jr.
Abram C. Shmerling
*N. S. Shofner
*Brian T. Shorney
*H. S. Shoulders
Harrison J. Shull
Burton Silbert
Thomas E. Simpkins
William T. Slonecker
Charles B. Smith
Charlie R. Smith
Daugh W. Smith
Grover R. Smith
Henry Carroll Smith
John Randall Smith
Marion L. Smith
Harvey Spark
W. A. Spickard
Bertram E. Sprofkin
Daphine Sprouse
Edward L. Staab
Richard L. Steele
Joseph Steranka
Frank W. Stevens
Hugh L. C. Stevens
James O. Stewart
Lee William Stewart
W. R. C. Stewart
William S. Stoney
Joe M. Strayhorn
W. D. Strayhorn
W. D. Strayhorn, III
Wilborn D. Strode
Paul R. Stumb
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A. J. Sutherland, Jr.
John P. Sutton
John M. Tanner
G. J. Tarleton, Jr.
Edward L. Tarpley
*Stanley R. Teachout
*Pauline Tenzel
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Emil Dewey Thomas
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L. E. Traughber, Jr.
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Cecil B. Tucker
*Harlin Tucker
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Arthur J. Viehman
Vernon A. Vix
Ethel Walker
Matthew Walker
John M. Wampler
James W. Ward
Russell D. Ward
Thomas F. Warder
John S. Warner
*Robert J. Warner
Thomas S. Weaver
Jimmy F. Webb
Ben H. Webster
Joseph Weinreb
Charles E. Wells
Arville V. Wheeler
Edward C. Wheeler
*Frank E. Whitacre
Roger K. White
Joe T. Whitfield
E. E. Wilkinson
Henry A. Wilkinson
Andrew L. Williams
Edwin L. Williams
W. C. Williams, Jr.
John Aaron Wilson
Nat T. Winston
Frank G. Witherspoon
*Jack Witherspoon
Norman E. Witthauer
Lawrence K. Wolfe
Frank C. Womack
Clarence C. Woodcock
M. C. Woodfin
John R. Woods
†John K. Wright
Samuel S. Wright
John Lanier Wyatt
John S. Zelenik
*Kate Savage Zerfoss
*Thomas B. Zerfoss
T. B. Zerfoss, Jr.

*Veteran
‡Post-Graduate
†Military

Old Hickory

*T. D. Dailey
James K. Lawrence
Robert P. Miller
Henry D. Murray
Howard C. Pomeroy
Edward Bullock Rhea
Robert G. Wheeler
Wendell W. Wilson

Smyrna

Socrates Pinto

Rock Island

*Will Camp

Westmoreland

*William P. Law

DICKSON COUNTY MEDICAL SOCIETY

Charlotte

Mary Baxter Cook
James C. Elliott, Jr.

Dickson

Walter A. Bell, Jr.
William A. Crosby
‡Shannon R. Curtis
James T. Jackson
William M. Jackson
Jack S. Kaley
Jerry Qualls
Bobby J. Smith

Murfreesboro

James T. Allen

FENTRESS COUNTY MEDICAL SOCIETY

Jamestown

B. Fred Allred
Guy C. Pinckley
Jack Smith
Shelby O. Turner

FRANKLIN COUNTY MEDICAL SOCIETY

Decherd

Dewey W. Hood

Sewanee

Ruth A. Cameron
Charles B. Keppler
Elizabeth W. Kirby-Smith
Henry Kirby-Smith
Joe L. Parsons, Jr.
*Oscar N. Torian

Winchester

Jo C. Anderton
Reynolds Fite
Gerald E. Johnson
George L. Smith
J. Van Blaricum

GILES COUNTY MEDICAL SOCIETY

Pulaski

Robert B. Agee
Ronald R. Dinella
*Walter J. Johnson
K. M. Kressenberg
*William A. Lewis
William H. Murrey
William K. Owen
John U. Speer
David M. Spotwood

GREENE COUNTY MEDICAL SOCIETY

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V. R. Bottomley
Robert G. Brown
*Leroy E. Coolidge
Robert A. Cooper
Robert S. Cowles, Jr.
Luke L. Ellenburg
Haskell W. Fox
Rae B. Gibson
*John G. Hawkins
Hal H. Henard
B. D. Holt
N. P. Horner
C. D. Huffman
A. K. Husband
Ben J. Keebler
C. B. Laughlin
W. L. Mason
Haskell B. McCollum
James R. McKinney
Michael J. O'Dell
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David O. Patterson
Calvin R. Reviere
John L. Shaw
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Mosheim

Dale Brown
Graydon Evans

HAMBLEN COUNTY MEDICAL SOCIETY

Dandridge

O. L. Merritt

Jefferson City

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John W. Ellis, Jr.
Samuel C. Fain
Jessie Eugene Howard
Frank L. Milligan
Estle P. Muncy

Morristown

W. K. Alexander
L. R. Barclay
Mack L. Bellaire
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H. T. Brock
J. D. Caldwell
Kemp Davis
Donald Ray Dees
Clarence J. Duby, Jr.
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Crampton H. Helms
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Charles S. Scott
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Rutledge

Leander C. Bryan
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Whitepine

Erman Dale Allen
Eugene R. Baker

HAWKINS COUNTY MEDICAL SOCIETY

Edison

John M. Pearson

Johnson City

*Clinton G. Lyons

Rogersville

Ralph Gambrel
Walter L. Goforth
William E. Gibbons
William H. Lyons
*Ottie M. Swanay

HENRY COUNTY MEDICAL SOCIETY

Paris

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A. C. Dunlap
*R. G. Fish
W. P. Griffey, Jr.
I. W. Howell
I. H. Jones
Barry P. McIntosh
Thos. McSwain Minor
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J. D. Mobley
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William Rhea, Sr.
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Kenneth G. Ross
J. Ray Smith
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HICKMAN-PERRY MEDICAL SOCIETY

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†T. James Humphreys
‡Arthur Lloyd Jones

Concord

‡Edgar D. Akin

Linden

Bertie L. Holladay
Gordon H. Turner, Jr.

Nunnelly

*Luther F. Prichard

Parsons

Robert M. Fisher
Paul F. Teague

JACKSON COUNTY MEDICAL SOCIETY

Gainesboro

*Herbert L. Baugh
Elijah M. Dudney
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KNOX COUNTY MEDICAL SOCIETY

Concord

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R. H. Duncan, Jr.

Corryton

*Marion L. Jenkins
A. D. Simmons

Halls

George Fillmore

Jefferson City

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L. Alton Absher
James J. Acker
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Tea Edward Acuff
William J. Acuff
Robert L. Akin
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Lynn F. Blake
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Richard F. Brailey
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Robert T. Brooks
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Clyde L. Capps
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Lloyd G. Caylor
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Jack Chesney
L. Warren Chesney
H. E. Christenberry, Jr.
K. W. Christenberry
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C. L. Chumley
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I. Reid Collmann

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Lloyd C. Davis
Martin Davis
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Ray V. DePue, Jr.
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*Wesley F. Dorsey
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Oliver W. Hill
Victor Hill
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Harry H. Jenkins
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A. Pat Kelly
A. Glenn Kennedy
John O. Kennedy
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Lamar L. Knight
Robert E. Knowling
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F. K. Lawson
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Gershom Mailman
Luis G. Maldonado
Margaret Maynard
Perry B. McCallen
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Bruce R. McCampbell
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Carroll W. McGinnis
J. S. McMurry
Robert W. Meadows
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George Murray
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Park Niceley
Hazel Marie Nichols
George T. Novinger
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Homer C. Ogle
B. M. Overholt
Turan Ozdil
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R. F. Patterson, Jr.
William L. Patterson
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*Jarrell Penn
*H. Dewey Peters
Ira S. Pierce
Cecil E. Pitard
*Samuel Joseph Platt
*Wm. Walter Potter
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Bruce R. Powers
Wilson W. Powers
H. Hammond Pride
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James C. Prose
John T. Purvis
John A. Range
Joe L. Raulston
Freeman L. Rawson
Thomas L. Ray
W. Gilmer Reed
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Paul D. Richards
Billy N. Riggins
Charles R. Roberts
John C. Rochester
Frank T. Rogers
William K. Rogers
†James Mitchell Rouse
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Burton M. Rudolph
Jack Rule
Kenneth B. Rule
John H. Saffold
Karl T. Sammons
Roy L. Seals
Richard C. Sexton
Digby G. Seymour
Samir B. Shamiyeh
Alex B. Shipley
‡K. E. Shoemaker
E. Charles Sienknecht
Frank J. Slemons
Charles C. Smeltzer
E. B. Smith
*Vernon I. Smith
W. Eidson Smith
*John Raymond Smoot
Alen Solomon
James L. Southworth
Terresa Stallworth
William P. Stallworth
Thomas F. Stevens
J. Hooper Stiles
J. M. Stockman
William K. Swann
Edward L. Tauxe
Dale A. Teague
*Dan Rees Thomas
Philip C. Thomas
William M. Tipton
Elsie V. Thompkinson
Lucian W. Trent
George M. Trotter
James E. Turner
M. Frank Turney
‡Thomas D. Vance
‡Howard Vesser
Bruce Walker
Norma B. Walker
James W. Wall
Calvin R. Wallace
Sidney L. Wallace
Donald E. Wallis
Clifford L. Walton
*R. G. Waterhouse
David H. Waterman
James H. Waters
David T. Watson
Glenn F. Watts
Alvin J. Weber
Roy A. Wedekind
Arthur W. Welling
Charles M. Wender
Fred West
Herbert F. White
Roger E. White
Richard L. Whittaker
John W. Whittington
Robert B. Whittle
Richter H. Wiggall
Lee L. Williams
M. L. Williams
G. A. Williamson, Jr.
Perry J. Williamson
Leon J. Willien
Richard B. Willingham
Stephen G. Wilson, Jr.
John B. Wofford
John H. Wolaver
George H. Wood
R. B. Wood
Paul T. Wooten
James P. Worden
O. H. Yarberry, Jr.
William T. Youmans
Vernon H. Young
Vincent T. Young
Eugene G. Zachary
Charles R. Zirkle
George A. Zirkle, Jr.

Lake City

John S. Burrell
Curtis C. Sexton

Lenoir City

Harold D. Freedman
Walter C. Shea, Jr.
R. V. Taylor

Loudon

Corrie Blair
Samuel A. Harrison
W. B. Harrison
William T. McPeake
J. R. Watkins

Mascot

John C. Adler

Maynardville

John A. Marsee

New Tazewell

William N. Smith
Jean C. Tarwater

Oak Ridge

Frederick W. Carr
Seaton Garrett
Ralph G. Nichols
David H. Sexton

Powell

Cecil E. Russell, Jr.

Seymour

James B. Bell

Strawberry Plains

Robert W. Creech
Ronald M. Webster

Tazewell

Fred W. Reed

Vonore

Troy Bagwell

LAWRENCE COUNTY MEDICAL SOCIETY

Lawrenceburg

Virgil H. Crowder
Virgil H. Crowder, Jr.
W. O. Crowder, Jr.
Boyd P. Davidson
Norman L. Henderson
James C. Hudgins, Jr.
Laurence B. Molloy
Villard Parrish
Walter S. Southerland
Carson E. Taylor

Loretto

Ray E. Methvin
M. H. Weathers, Jr.

Waynesboro

A. K. Ghosh
Jaime V. Mangubat
Dexter Woods, Sr.

LINCOLN COUNTY MEDICAL SOCIETY

Ardmore

Clyde B. Marshall

Elora

*A. L. Griffith

Fayetteville

Edwin E. Blalack
Ann U. Bolner
Paris Bransford
L. M. Donalson
Wm. D. Jones
Ben H. Marshall
*Robert E. McCown
*J. V. McRady
Bobby G. Norwood
T. A. Patrick, Jr.
*John E. Sloan
C. Doyne Toone
Paul E. Whittemore
William Young

Kingsport

Leslie J. Stubblefield

Lynchburg

F. Harlan Booher

MACON COUNTY MEDICAL SOCIETY

Lafayette

Charles Chitwood, Jr.
Jack Clark
E. M. Froedge
*Max E. Painter

MARSHALL COUNTY MEDICAL SOCIETY

Lewisburg

Kenneth P. Brown, Jr.
Kenneth Brown, III
Hoyt C. Harris
J. C. Leonard
H. A. Morgan, Jr.
K. J. Phelps
Wm. Saxon Poarch
Jones F. Rutledge
H. H. Shoulders, Jr.
Linda C. Staley
William L. Taylor
James E. Tinnell
J. F. VonAlmen, Jr.
W. A. Walker

MAURY COUNTY MEDICAL SOCIETY

Columbia

David Boyd Andrews
Wendell C. Bennett
Charles R. Brite
R. R. Clifford, Jr.
Wm. N. Cook
Eldon S. Dummit, Jr.
I. Edward Ewton
William G. Fuqua
Carl C. Gardner, Jr.
Daniel R. Gray, Jr.
Joel T. Hargrove
John W. Harris
Valton C. Harwell
Harry C. Helm
Wm. N. Jernigan
Ralph Kustoff
Ambrose M. Langa
Robin Lyles
George Cooper, Jr.
George A. Coors
*Giles A. Coors
G. R. Mayfield, Jr.
Clay R. Miller
Lawrence R. Nickell
Edwin K. Provost
David R. W. Shupe
Billy J. Vinson
Leon S. Ward
J. Wallace Wilkes, Jr.
Tom K. Young, Jr.

Hohenwald

William C. Keeton

Jamestown

Lloyd L. McCormack

Mt. Pleasant

*Gover C. English
Allyn M. Lay
J. O. Williams, Jr.

Whitehaven

M. T. Rayburn, Jr.

McMINN COUNTY MEDICAL SOCIETY

Athens

Lewis D. Curtner
Roy W. Epperson
*Carey O. Foree
Wm. Edwin Foree, Sr.
Wm. E. Foree, Jr.
Robert Daniel Hays
Robert G. Hewgley
Milnor Jones
John H. Lillard
John C. McKenzie
J. L. Montgomery, Sr.
Jess A. Powell, Jr.
Helen M. Richards
Lester H. Shields
Robert W. Trotter

Big Springs

*Charles F. Warren

Decatur

*W. L. Wilhelm

Englewood

James F. Cleveland

Etowah

Charles T. Carroll
William Kenneth Frye
H. P. Whittle, Jr.
Thomas W. Williams

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

Arlington

Malcolm A. Baker
James S. Brown
Ersel A. Crawford
Edward N. Mogan

Bartlett

Edgar Seth Wilson

Collierville

Ernest F. Apple
J. E. Outlan

Cardova

L. W. Diggs
Irma S. Kennedy

Counce

H. D. Gray

Germantown

John T. Carter, Jr.

Kingsport

Joe B. Cooper

Millington

*James F. Bradley
A. J. Cates
Billy W. King

Memphis

Sara Abbott
Robert F. Ackerman
John Q. Adams
Lorenzo H. Adams
R. M. Addington
Henry L. Adkins
Justin H. Adler
G. H. Aivazian
Howard Thomas Akers
Albert M. Alexander
James E. Alexander
Chester G. Allen
F. P. Allen, Jr.
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Robert G. Allen
F. H. Alley
Jacob Alperin
James L. Alston
J. P. Anderson
L. D. Anderson
*Sam B. Anderson
Sam B. Anderson, Jr.
D. N. Anishanslin
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Leland L. Atkins
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J. Earl Baker
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Reid L. Ballinger
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Steven Hunter Bell
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Albert William Biggs
J. D. Biles
E. S. Birdsong, Jr.
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‡Post-Graduate
†Military

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Carolyn F. Blackwell
Basil A. Bland, Jr.
Breen Bland
Phil B. Bleecker
Herbert Blumen
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Daniel A. Brody
Maury W. Bronstein
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Horton G. DuBard
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William Lloyd Duncan
Hamel Bowen Eason
Leslie Edmund Eason
E. S. Eddins
A. S. Edmondson
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Milton L. Evans
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Turley Farrar
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Harold Feinstein
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Charles Walter Fitch
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*Robinson B. Flaniken
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Julian Glenn Fleming
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Hugh Francis, Jr.
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Edgar R. Franklin
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W. Edward French
C. E. Frankum
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Burt Friedman
Mellon A. Fry, Jr.
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Ricardo R. Fuste
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Richard H. Garrett
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L. R. Graves, Jr.
Allan E. Green, Jr.
A. W. Green
C. R. Green
Jack Grenfield
Jerry Wade Grise
H. T. Grizzard
A. J. Grobmyer, Jr.
F. T. Grogan, Jr.
Charles W. Gross
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